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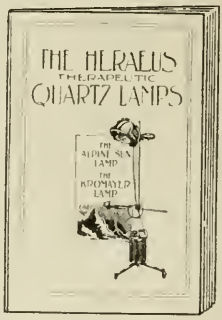

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THE JOURNAL OF
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VOL. XXXV JANUARY, 1917 No. 1

ORIGINAL COMMUNICATIONS.

ON A RARE FORM OF SCLERODERMA.*

BY A. RAVOGLI, M.D., CINCINNATI.

THE object of reporting this case is to illustrate a form of disease which shows some peculiar clinical features. It occurred in a man in apparent good health, aged 32 years, married; he has had no children, is of strong constitution, and is employed as private policeman in a lumber concern. Not much could be learned of his parents, both of whom are dead, probably as a result of tuberculous affections.

CASE REPORT.

The patient, who claims to have always had good health, ascribes the origin of his present trouble to a cold. While watching at night in the lumber yard, he was caught in a heavy rain and remained the rest of the night with his wet clothes on.

Since then he began to experience pain all over the body, especially in the spinal region, which complaint the local physician treated as rheumatism. He got better of these pains but when he tried to leave the bed, his arms and legs were so stiff that he could scarcely walk. A short time afterwards the skin of the arms and legs showed rose-red patches, somewhat elevated above the normal skin, irregular in shape, hard, thick and numb in sensibility. The face and the trunk were free from manifestations. The scleroderma began at

* Read before the 40th Annual Meeting of the American Dermatological Association Washington, D. C., May 13 to 15, 1916.

the elbows as hard, round patches, coalescing and forming a round, irregular patch at the radio-humeral joint, and another on the other side, at the ulnar-humeral joint; the skin was œdematous, rose-red in color. The radio-humeral patch proceeded towards the middle of the flexor surface of the arm as a narrow stripe. The seat and the direction of this stripe corresponds exactly to the ramification of the radial and of the median nerves.

At the lower third of the arm, the patches forming a stripe are much more widened, forming a single patch at the place of anastomosis of the various cutaneous nerve branches. A similar fusion of small patches forms an irregular sclerotic spot on the backs of both hands. On the flexor surface of the arms the sclerodermic patches begin at the humeral-ulnar joint, just at the point of exit of the anterior brachial internal cutaneous nerve. Round patches, coalescing, form an irregular stripe which, proceeding towards the hand, reaches the wrists. Here a large patch is formed, somewhat irregular in outline, thick and hard, where anastomoses are formed between the ramifications of the palmar cutaneous branch of the ulnar, with those of the median. The palms are not affected.

The same condition is shown in the legs, from the thigh to the foot. The sclerodermic patches cover nearly the whole anterior surface of the thigh, intermingled with which there are black, pigmented spots, while the posterior surface shows only a few patches. The skin is much more affected at the knee-joint, around the patella, appearing as rose-red, thick, diffuse patches, which are shown also on the anterior surface of the leg, reaching to the foot. At both knee-joints the sclerotic skin is deeply ulcerated, presenting round ulcers, some coalescing and forming long, irregular patches. On the right leg the ulcers begin from the patellar region and gradually extend to the inferior third of the leg. On the left leg the ulcerated patches from the knee-joint run down towards the internal surface of the leg. The ulcers have a thick, hard base, with elevated edges, covered with thick, hard, warty granulations, discharging scanty serum, the whole covered with thick, heavy crusts, formed mostly by epidermic scales. The ulcers are clearly of traumatic origin on a hardened, infiltrated skin, resembling somewhat epitheliomatous ulcers.

A negative Wassermann reaction ruled out syphilis.

Fig. 1.

It is easy to understand that scleroderma is not a local disease, but that it has its origin in a general affection, which can produce disturbances of the greatest importance. The case already described cannot be referred to that variety of scleroderma described by Fischer, as sclero-

FIG. 2.

FIG. 3.

dermia circumscripta lichenoides, which may be nothing else than a kind of lichen planus atrophicus. It cannot even be compared to lichen albus of von Zumbusch, nor can it be grouped with the variety described by Hallopeau, as lichen planus scleroso-atrophicus, which is only a variety of lichen planus. The *leucodermie atrophique* of Millian could probably be shown to have some analogy to our case; but from the clinical symptoms, from the hardness and swelling of the skin and from the histological features, it could never be considered as leucoderma. In the same way, the *kartenblattähnliche* form of scleroderma as described by Unna, cannot be applied to our case, where there was no atrophy but rather thickening and elevation of the affected sclerotic skin.

ÆTIOLOGY. In our case the skin began to show alterations together with neuralgic pains of the peripheral nerves. The views of Singer,[1] on the possibility of a disturbance of the internal secretions, seems not quite acceptable in our case. In the case reported by Singer there was myxœdema with scleroderma, and well defined degenerative changes in the thyroid gland.

It may be possible that an affection of the suprarenal glands and the hypophysis, would, according to Mosenthin,[3] produce alterations in the

nutrition of the skin by their disturbed equilibrium. Bloch[3] called attention to the great influence of the internal secretion on the production of leucoderma. Through the quantitative and the qualitative changes of the hormones, an allergic condition follows, which is equivalent and similar to the action of the diatheses, by producing alterations in the reactivity of the skin.

In our case, however, although severe scleroderma together with pigmentation were present, yet there were no symptoms to indicate a disturbed condition of the internal glands. The patient did not have tachycardia, any increased blood pressure, any enlargement of the thyroid, any lymphocytosis, nor any eosinophilia.

In some cases, the pigmentation is connected with a disturbed function of the suprarenal glands. According to Lichtwitz,[4] the pigmentation must be the result of adrenalinæmia, due to an increased function of the suprarenal glands. The adrenalin, when carried to the surface of the skin, is oxidized, precipitated, and the pigmentation would be the discoloration resulting from the products of the oxidation. It is also possible and more probable in the case, that from a spastic contraction of the blood vessels, the coloring matter of the blood is forced out of their tunics, and infiltrates the tissues of the skin.

The hypophysis has been considered as a factor in scleroderma. Strümpell, Wiju, and Rasch[5] believe in a diminution of the function of the hypophysis, while others believe in an exaggerated function. Biedl[6] maintains that a disturbed function, either in excess or in defect, is the result of anatomical alterations in the gland. Huisemann[7] and Wernie have found scleroderma and acromegalia in the same patient, and to-day acromegalia means hyperpituitarism.

Scleroderma has also been ascribed to an affection of the sympathicus, which causes disequilibrium in the secretion of the glands and produces the changes in the skin. Klinger,[8] referring to a case of scleroderma in a man of 45 years, could see nothing else than a high sympathicotonus, which produced disordered secretions.

Cassirer[9] pointed out the association of scleroderma and paralysis agitans, which he considers the result of an alteration in the parathyroids. Lehndorff[10] found tumor of the hypophysis with scleroderma.

In these cases it seems that the blood contains in excess, materials which have vasoconstrictor action. This, however, has not been proved and the only explanation is that adrenalin-like substances are not constantly increased in the blood, but that their increase is only temporary and in alternating spells.

We find that the contention of Touchard[11] is best applicable to our

case. Touchard, although he believes that an intermittent secretion of adrenalin is a symptom of scleroderma, claims that it is not entirely due to affection of the blood-forming glands.

All the disturbances of vasomotor origin, as angioneurotic œdema, acroparæsthesia, erythromelalgia, scleroderma, sclerodactylia, Raynaud's disease, can be considered as related in their ætiological origin. It happens that we see these forms of disease in the same subject, either successively or at the same time, in different degrees of intensity.

It seems, in our case, judging from the degree of hardness of the affected skin and from the manner of onset, with severe peripheral neuritis, that there is some similarity to the case reported by Arning,[13] under the name of erythema perstans pseudoleprosum. In our case the distribution of the scleroderma and the grouping of the patches show clearly the nervous origin of the disease. Substances may have been formed which produce stimulation of the vasomotor centres, which alters the circulation. The process can be assumed to lie in an alteration of the blood vessels, due to vasoconstrictor substances, and the clinical manifestations are the results of an increased tonus of the action of the sympathicus.

Cybulski,[13] with repeated adrenalin injections, produced alterations in the blood vessels. The alterations are not due to the increased pressure of the blood, but rather to chemotoxic substances, which are pushed into the circulation by the increased hæmodynamic condition. Their action is not limited to the sphere of the blood vessels, but the lymphatics also are affected by the adrenalin. Lewin and Heller[14] found obliteration of the thoracic duct in two cases of scleroderma, which they consequently believed to be the result of a general lymph stasis.

Kaposi, Koebner, Lassar, Unna,[15] Nothhaft[16] and others claimed to have found in scleroderma decided changes in the lymphatic vessels, due to a protracted constriction, which produces hypertrophy of the collagenous tissues. Mosenthin believes that substances with vasoconstrictor action, together with other toxic elements, are capable of injuring the walls of the blood vessels, which in turn cause the disturbance of the skin. The view that the affection of the blood vessels was the cause of scleroderma, began with Vidal and was maintained by Crocker, Bales, Neumann and others. Dinkler[17] and Gaucher[18] do not admit an inflammatory process in scleroderma, but claim that the affection of the small arteries of the skin is the cause of an interstitial inflammation which causes the hardening of the skin.

The relation of scleroderma to the distribution of the cutaneous nerves, in the form of stripes, as in our case, has been already observed

by many authors, as Neumann,[19] Crocker,[20] Taenzer,[21], Arning, Thibièrge, etc.

In some cases the distribution corresponded to a group of nerve ramifications proceeding from a spinal nerve (Bruns,[22] Lion[23]). In the same way, in cases of diffused scleroderma there is a tendency to symmetry, but in some cases the affection remains on one side only. In the study of the physiological products of the body, we find that when they are altered, they produce pathological secretions, which, however, are not persistent, but only intermittent and appearing in small quantities. This condition explains the different forms and degrees of the angioneuroses in the same individual.

The protracted contraction of the blood vessels under the influence of a vasoconstriction, and the consequent ischæmia in the area of the blood vessels, together with the injurious influence of the adrenalin-like substances on the tunics of the blood vessels, easily explain the pathological alterations in scleroderma, and their degenerative and chronic inflammatory nature.

Any infection in predisposed individuals may produce scleroderma. The infection disturbs the harmony of the blood-forming glands, either by affecting some of them directly, or, through bacteria, affecting the function of hormones, or by affecting the organs of the circulation directly; or by affecting the central nervous system, thus causing an abnormal production of the hormones. An example is seen in Basedow's disease, which follows amenorrhœa and infectious diseases. It occurs very frequently that nervous affections are associated with scleroderma. Indeed, the constriction of the blood vessels increases pressure and produces congestion, and as a consequence hæmorrhage ensues; while on the other hand, in delicate organs, it may cause ischæmia. The result of the circulatory changes may be sclerosis, atrophy, or a softening or degenerative process. Cybulski, experimenting with repeated injections of adrenalin, found that it caused extravasation in the brain and in the medulla oblongata, and in other organs. Biedl has seen shrinking of the cells of the ganglia and thickening of the ependima of the ventricles, hardening of the pia, degenerative processes of the cord, and lesions of the cells of the ganglia of the symphaticus.

Nearly all authors agree that one of the exciting causes of scleroderma is a sudden change of temperature, a sudden exposure to the cold. In our case, the patient was caught in a thunder storm, and he remained the rest of the night with his wet clothes on. From this time he began to suffer paræsthesia and gradually the skin of the extremities began to show hardening.

Nicholich, Brück, Andres, Ball, Gintrac and many others have reported cases in which scleroderma made its appearance after an exposure to severe cold. Yet many others, like Besnier and Doyon, Wolters, Pellizzari, Marianelli, etc., have concluded that besides a change of temperature, many and different factors may cause scleroderma.

The idea of toxic elements disturbing the internal secretion was maintained by Schwerdt and Kölle. They believed that in consequence of insufficiency of the mesenteric glands, toxic elements are thrown into the circulation with impairment of the equilibrium of the blood-forming glands. As a consequence, scleroderma would be the result of a disturbance of the internal secretions, with increased tonus in the sympathicus. The central point of distribution through the system of the chromaffines is the hypophysis, and it is very likely that in disturbances of this organ is found the true reason for scleroderma.

If this theory can be accepted, another question arises, how and why the hypophysis is affected. We cannot forget that the most common infections attacking the human system are tuberculosis and syphilis. Syphilitic affections of the hypophysis, resulting from hereditary or from acquired syphilis in the form of diffused interstitial hypophysitis, and of gummata, have already been reported by Simmonds.[24] Tuberculous meningitis is rather a common occurrence, and tuberculous affections of the hypophysis could not be denied.

A chronic affection of the hypophysis can therefore be considered as a predisposing cause, and the sudden change of temperature, as a determining cause in scleroderma.

One of the remarkable features in this case was the occurrence of extensive ulcers in the scleroderma areas of both legs. The ulcers extending from the knee-joint to the lower third of both legs, were thick, elevated, with thick granulations, covered with heavy crusts and epithelium. At first glance they looked like epithelioma, but microscopic examination did not reveal definite characters of new growth. They were considered to be warty, granulating ulcers on a sclerotic skin, very likely resulting from trauma to which the knees and the anterior surfaces of the legs are frequently exposed. Hartzell[25] reported a case of morphœa-like epithelioma, which had been diagnosed as ulcerated morphœa. Radcliffe Crocker and Pernet[26] described a tumor of the consistency of leather, as a neoplastic, yellow plaque, which Pernet later on called morphœaform rodent ulcer. Heidingsfeld[27] reported a case of epithelioma developing upon a patch of morphœa.

Cancer finds a good soil for its development in all tissues which have lost their reactivity. The skin affected with scleroderma, with its

connective tissues hard, infiltrated, and affected by hyaline degeneration, is likely to ulcerate and also to show cancerous changes. Amongst the precancerous conditions, scleroderma is mentioned.

The ulcers were treated with bichloride of mercury, 1 to 2000 solution as a wet dressing, twice daily, and were covered with benzoated oxide of zinc ointment, containing about four per cent. of calomel. The patient was advised to take small doses of calomel, twice a day, and saturated solution of potassium iodide, after each meal. Under this treatment the patient has improved, the ulcers have healed and he has been able to return to his occupation.

From the consideration of this case we can derive the following conclusions:

1. The scleroderma in this case was probably due to peripheral neuritis.
2. The system was affected by a form of diathesis, which had disturbed the equilibrium of the internal secretions.
3. The sudden change of temperature acted as a determining cause.
4. The granulating ulcers were merely an accidental manifestation on the sclerodermatic patches.

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Discussion.

Dr. Pusey said he wished to thank Dr. Ravogli for his very instructive and valuable summary of what was now known about scleroderma. He had nothing to add other than to express his appreciation of the paper in that respect. The speaker thought he had seen one or more cases of scleroderma, like that of Dr. Ravogli's, in which there had been a diffuse scleroderma of the extremities, followed by atrophy, in which it had not been possible to demonstrate the disturbance of the hormones.

The speaker said he had also used thyroid extract in scleroderma at the recommendation of neurologists, who seemed to regard it very favorably in getting rid of scleroderma. The speaker said if it was a thyroid disturbance it was one which in a good many cases could not be relieved by thyroid extract.

Dr. Brayton said that Dr. Osler had stated that thyroid extract should be used in every case of scleroderma. The speaker had met with six cases of widely diffused scleroderma in adults, all of whom had died of the disease between their thirty-fifth and fiftieth year. The patchy forms were not uncommon in clinics and in private practice. One notable case, a woman of forty, had the linear form, commencing at the ankles, passing up into and invading the mucous membrane of the vagina, and ultimately, after ten or twelve years, resulting in death. An adult male, fifty-six years of age, had patches averaging two to six inches in diameter over the trunk and the legs. A large patch in the popliteal space produced a false ankylosis, which was relieved by splints, massage and ointments.

Very notable was the case of a girl, eight years old, suffering from tonsillar infection and three weeks' resulting fever. During this time the skin became so hardened from the scalp to the toes that it was impossible to pinch it up in any portion of the body. Her appetite was immense as she convalesced, eating four or five meals a day and active in playing about the hospital grounds. After three months resolution began and her condition was normal by the end of five or six months. The patient was found healthy four months after her recovery.

One case still under observation, an otherwise healthy male, a barber and bartender, had suffered with acute scleroderma, involving all areas except the upper and lower extremities below the knees and elbows. No treatment had

been of any apparent avail. His age was about thirty-two. His greatest difficulty was dyspnœa, due to indigestion with formation of gas, preventing diaphragmatic breathing; his chest was as hard as a board. Except the first mentioned, the writer had known no case of widely diffused scleroderma to recover.

Dr. Hartzell said that morphœa-like epithelioma was an epithelioma resembling in appearance morphœa and not a morphœa which had become epitheliomatous.

Dr. Wise said that the excellent clinical description and photographs presented by Dr. Ravogli led him to consider the question, whether the subject of the report represented an instance of acrodermatitis chronica atrophicans, associated with the usual sclerodermatous lesions on the extremities. He thought that the presence of syphilis in the patient was a mere coincidence and that the two affections—cutaneous atrophy and syphilis—were unrelated and ætiologically independent, as was the case in an instance of acrodermatitis atrophicans which he had reported about two years ago. In over two hundred cases of the disease, collected from the literature by Finger and Oppenheim, not one could be traced to syphilis as the causative agent. He also called attention to the peculiar "ulnar band" of scleroderma on the forearms of Dr. Ravogli's patient—a feature peculiar to nearly all cases of acrodermatitis atrophicans.

Dr. Ravogli said that in regard to what Dr. Pusey had spoken about, namely the administration of thyroid extract, these cases usually did not give results at all. He had obtained better results from the use of potassium iodide and calomel internally. In regard to what Dr. Hartzell had said about morphœa-like epithelioma, he had seen an epithelioma develop in a patch of morphœa or circumscribed scleroderma, with all the characteristics of an epithelioma, but this man had received many applications of X-ray on the sclerodermic patch. He could not say, in regard to the scleroderma, whether the morphœa had anything to do with the production of the epithelioma, or if the repeated applications of the X-ray had been the cause of the change in the epithelium, which produced the epithelioma. The speaker thought that acrodermatitis chronica atrophicans could fit very well for the beginning of the disease, but there was no doubt that it was a case of scleroderma. In regard to the ætiology relating to syphilis, he could say that the Wassermann reaction had been perfectly negative, and this man had denied any possibility of syphilis. However, the parents died of a disease which could not be defined and he entertained the idea that they died of a tuberculous infection.

Dr. Ravogli said that perhaps his case had been of a tuberculous origin, and the cause of the skin condition came on after the sudden change in temperature and the cold had produced neuritis, with inflammatory processes, which were followed by scleroderma.

THE FOLLICULAR TYPE OF ECZEMA SEBORRHŒICUM.*

By William B. Trimble, M.D., New York.

Professor of Dermatology and Syphilology, New York University (University and Bellevue); Attending Physician, New York Skin and Cancer Hospital.

(From the Department of Dermatology, New York University—University and Bellevue.)

Realizing fully that the old adage, "There is nothing new under the sun," contains much truth, it is with some trepidation that one ventures a supposedly fresh or original observation. Still there are certain things, not in themselves new, which have escaped detection. It is one of these overlooked facts that prompts these brief remarks.

For a number of years past I have observed, from time to time, a peculiar clinical type of seborrhœic eczema. So far as my knowledge extends, which includes a reasonably careful survey of the literature, this variety has not heretofore been recorded.

It seems almost certain, after attention has been called to this follicular expression of eczema seborrhœicum, that many dermatologists, especially those in attendance upon large clinics, will recall having seen such cases. The type now to be described was first noticed in its localized form: later it was discovered that under certain conditions favorable for coalescence and spreading, it can become diffuse.

The localized or patch form occurs commonly on the chest and upper back, as does the ordinary type of seborrhœic eczema; it is extremely rare on the face, but has been noticed on the scalp, along the hair line, both in front and over the temporal regions.

Typical lesions of this variety, as seen on the chest or back, are patches that range in size from a silver dime to a half dollar; they are brownish-red in color, about the same as the usual lesion of seborrhœic eczema, and are made up of a great number of inflammatory follicles, situated very close together, but always discrete. These follicles are slightly pink and enlarged, with dilated mouths; in each opening and around it, is seen a piling up of small, greasy scales, making a tiny cone; in fact each individual follicle is a miniature lesion of seborrhœic eczema. The grouping of a large number of such minute lesions makes up a patch of the so-called follicular type.

* Read before the 40th Annual Meeting of the American Dermatological Association, Washington, D. C., May 13 to 15, 1916.

Over the whole area the evidence of seborrhœa is apparent, recognized by the usual slightly oily appearance. When this follicular type becomes diffuse, it will be observed that the mild thickening, seen in the local patch, has materially decreased; the infiltration seems to thin out as spreading takes place.

In the diffuse form, the eruption spreads gradually over the chest and back, until practically the whole upper half of the body is affected, with the exception of the face. At all times, however, the follicles stand out quite clearly, and the general appearance is one of a diffuse follicular disease of a seborrhœic nature, associated with a moderate amount of furfuraceous scaling.

In an exaggerated case of long standing, the integument is rough to the touch, and in a mild sense takes on the nutmeg-grater appearance. It is this type of case that bears some resemblance to a beginning lichen ruber acuminatus. There is, of course, no possibility of confusing the lesion in question with a typical or classical case of lichen ruber acuminatus, but the imagination need not be too greatly taxed in thinking that the earliest stage of the latter disease may begin in this way.

In the very first case of the diffuse form that came under observation, early lichen ruber acuminatus was seriously considered. After long study and many weeks of inefficient therapeusis, I was finally able to arrive at the proper diagnosis.

A brief history of this first patient will be detailed.

Case Report.

The patient was a young woman, aged 23 years. She was an American by birth, and her general health was exceptionally good. Her family and past history had no bearing on the case, and the skin affection was the only serious malady that she had encountered. The duration of the cutaneous disease was 10 years. It was first noticed when she was 13 years old, and according to her statement, began on the chest.

On examination, the entire upper half of the body, from the base of the neck to the waist line, back and front, was covered with a follicular eruption. The follicles were discrete, very slightly inflamed, and the whole area was covered with a fine, furfuraceous scaling. The skin was slightly greasy and had the nutmeg-grater appearance; the neck was free; the face was fat, distinctly greasy and exhibited a few scattered acne papules. The scalp contained an abundance of scales, which were somewhat dry, as compared to the body lesions.

The patient was treated for two or three months with the usual remedies for seborrhœic eczema,—salicylic acid, sulphur, resorcin, etc.,—with some improvement; but no marked impression was made on the

eruption. An indirect way of reasoning made it seem rational to use the acne vaccine. This seems somewhat far-fetched or illogical, and perhaps requires some explanation, though I am making no excuse for it. Whether the good result, ultimately accomplished in the case, was in a measure due to the vaccine, or whether it was entirely due to the continued use of the external remedies, is a question.

There is much confusion in regard to the microbic theory of seborrhœa, acne, etc. It has been stated that the spores of Malassez and the micrococcus of Unna are the same, and the Bacillus acnes of Gilchrist and the micro-bacillus of Sabouraud are identical. Reasoning from the premise that Sabouraud's contention is true, that there can be no acne without an antecedent seborrhœa, then acne is secondary to seborrhœa. Following the argument of this author still further, that the comedo is a cocoon, the basis of which is his micro-bacillus, and assuming that this bacillus and the so-called acne bacillus are the same, then the stock vaccine on the market containing the acne bacillus may be nothing more than the micro-bacillus of Sabouraud.

If these hypotheses are true, then the acne vaccine should be beneficial in eczema seborrhœicum, as this variety of eczema occurring on the body surface, is seborrhœa, associated with mild inflammation, practically the old seborrhœa corporis of Duhring.

A weekly injection of three to five million dead bacilli was administered to the first case of the diffuse type, and the eruption disappeared in about two months.

The combined treatment was given to a second case; it consisted of vaccine and also external remedies, and the patient recovered in 2½ months. To a third case the external remedies alone were given, with the intention of beginning the vaccine later, but the patient stopped his visits at the clinic, consequently our observations ceased.

It is not the purpose of this paper, nor is it desirable, to go into details of treatment; the therapeutic measures are merely outlined to form one link in the chain of proof, that the disease under discussion has seborrhœa as its foundation.

It was known during the entire time, that we were dealing with eczema seborrhœicum, when the cases of the localized type began to present themselves, still we were unfamiliar with the type. When the diffuse variety first came under observation, we did not at first realize that we were working with seborrhœic eczema, therefore the diagnosis was difficult. Now that we recognize the type, the diagnosis is comparatively easy.

The only references discovered which seem to have any bearing on

the subject are three in number. The first is a short one in a small text book by Max Joseph—Lehrbuch für Hautkrankheiten, 7th edition, page 118.

The writer, in the chapter on seborrhœic eczema, calls attention to the fact that there are occasional forms of seborrhœic eczema in which the inflammatory process is localized about the follicles, and further states that these forms take a mid-position between eczema and psoriasis. When this part of his article on eczema was first read, it seemed as if he were referring to the same type that I have in mind, but upon further perusal in regard to the mid-position of the type between eczema and psoriasis, I felt quite sure that he was speaking about an entirely different form, as the type observed by me has absolutely nothing to do with psoriasis. If I am interpreting this reference correctly, it seems to refer to that type of seborrhœic eczema, where the lesions are so small that it resembles the punctate variety of psoriasis.

Darier, in his Précis de dermatologie, page 374, under the title, "follicular eczema," speaks of three stages: acute, subacute and chronic.

The description of the subacute form bears some resemblance to the lesion already described, though he concludes the section by saying that coalescence causes the formation of the well-known patches of eczema *figurées*. In the follicular type under discussion, when this fusion of patches takes place, it does not form the figured eczema.

Brocq, in his *Traité élémentaire de la dermatologie pratique*, Paris. 1907, page 800, speaks of a peripilous form. The description in parts approaches very closely to the lesion that I have described, though he concludes by saying that it is the forerunner of Malcolm Morris's eczema folliculorum. Follicular seborrhœa, as it has been observed by me, has no kinship with the follicular eczema of Morris.

SUMMARY.

1. Follicular seborrhœic eczema is of two varieties—local and diffuse.
2. It is not frequently observed; the local form is fairly common in a large clinic; the diffuse is rare.
3. The disease is practically confined to the upper half of the body, mainly the trunk.
4. It is always associated with pityriasis capitis: this is moderate in the local form, but quite abundant in the diffuse variety.
5. An oily seborrhœa of the face is a frequent concomitant symptom in the diffuse variety: this symptom, however, is not always present.
6. It has been the habit in the clinic to speak of this skin affection

PLATE I.—To Illustrate Article on Follicular Eczema Seborrheicum, by WILLIAM B. TRIMBLE, M.D.

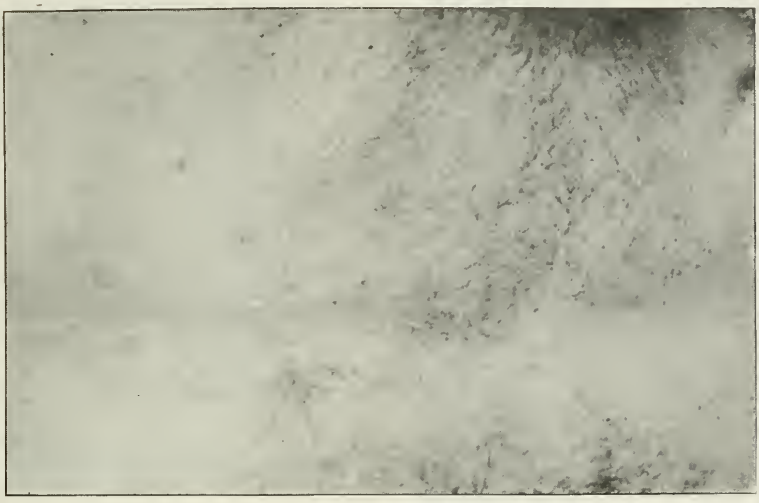

FIG. 2.

Follicular seborrheic eczema: localized form.

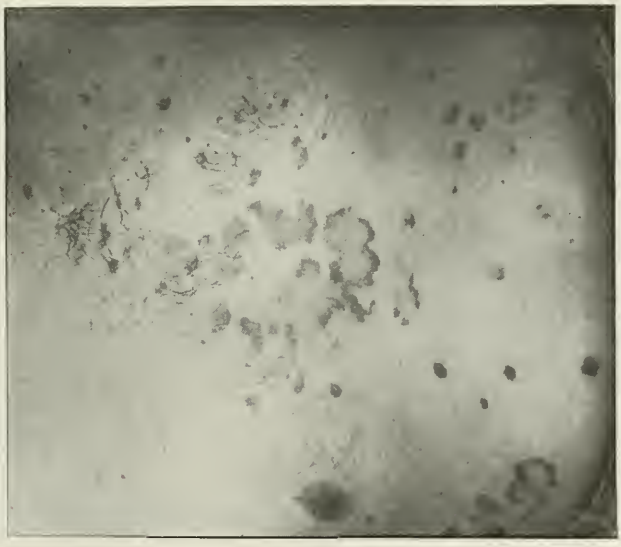

FIG. 1.

Seborrheic eczema: ordinary type.

Plate II.—To Illustrate Article on Follicular Eczema Seborrhœicum, by William B. Trimble, M.D.

Fig. 3.
Follicular seborrhœic eczema; localized form.

Fig. 5.
Follicular seborrhœic eczema; localized form, becoming diffuse.

Fig. 4.
Follicular seborrhœic eczema; localized form; large patch.

PLATE III.—To Illustrate Article on Follicular Eczema Seborrhœicum, by WILLIAM B. TRIMBLE, M.D.

FIG. 7.

Follicular seborrhœic eczema: diffuse form.

FIG. 6.

Follicular seborrhœic eczema: diffuse form.

as the follicular type of seborrhœic eczema, but in view of the fact that it is more properly a folliculitis, rather than an eczema, it seems to me the title, "folliculitis seborrhœica," would be more appropriate.

Discussion.

Dr. Gilchrist said, in reference to vaccine therapy, that he had tried it some years ago, particularly the Streptococcus albus, which had been given empirically, and he had gotten some very startling results in some cases. It had been given in doses of three to five hundred million in a man with seborrhœic eczema, which cleared the case up in ten days. The speaker said they had not always been able to support that treatment, the effects at first being marked, but not so good later. His assistant had used vaccines in a number of private cases and that particular form of disease seemed to yield best to the Streptococcus albus vaccine. In reference to the Bacillus acnes, he had a number of private cases of persistent alopecia, the hair falling out, associated with seborrhœa, the same thing Dr. Trimble had spoken about. The application of vaccines for alopecia had not encouraged the speaker much by its results, having had no effect upon these cases whatever.

The speaker said he thought he had tried it in about twenty cases, in which it had not been beneficial. He had also tried the Bacillus acnes ointments for seborrhœa, which Dr. Trimble mentioned, which seemed to have some beneficial effect, but the speaker used a very strong ointment, about ten per cent. It was, however, so expensive an ointment, that he had given up its use.

Dr. Heimann said that Dr. Trimble deserved credit for first having isolated this variety of the disease and having divorced himself from the idea of seborrhœal eczema. The speaker said it was perfectly proper to speak of seborrhœa and qualify it as one wanted to, but one was speaking of a separate clinical entity, notwithstanding when seborrhœal dermatitis or eczema was employed. This particular type, of which Dr. Trimble had spoken, was a hyperkeratotic folliculitis and the speaker had seen photographs of the same which had suggested nothing of eczema. The speaker said he was glad to have had this point brought out at last, and recognized by dermatologists.

FISSURE OF THE LIP: A DEVICE FOR ITS TREATMENT.

By William Allen Pusey, M.D., Chicago.

It may hardly seem worth while to offer a suggestion for the treatment of so trivial a condition as a fissure of the lip, and yet these lesions are annoying and often very persistent. I have had come to me more than one case of fissure of the lip that had persisted in spite of one sort of treatment or another for several months, and I recall two cases that were simple fissures of the lip and nothing else, that had persisted for more than two years. These experiences make me feel that their treatment is not always entirely satisfactory. Of course, they can be cured, when they have not gotten deep, by frequently greasing the lips, but this treatment requires that the ointment be put on several times a day, so that the lip will not dry out and crack between applications.

The reason that fissures are rebellious to treatment, of course, is that they are kept open—as they are formed—by the movements of the lips. To heal them promptly it is only necessary to apply a fixed dressing to prevent this splitting, and the device I suggest is the application of a piece of adhesive plaster on the vermilion border of the lip across the fissure, so that it will prevent the spreading of the lip at the fissure. Such an adhesive plaster dressing, if well applied, will adhere for from twelve to twenty-four hours. It then becomes loosened by the saliva. The patient should be instructed to apply immediately a new strip when the old one becomes thoroughly loosened. For the same purpose I formerly used a little dressing of gauze and collodion, but the adhesive plaster is easier to apply and adheres longer.

It is surprising how much relief this dressing gives; with it the individual can talk, laugh, cough, sneeze or eat without the inevitable cracking of the lip. The application of such a dressing for even twelve to twenty-four hours will allow most fissures to heal sufficiently to be able to withstand the movements of the lips, and so go on to complete healing without further dressing. A few days' application of such a dressing will cure the most persistent fissure.

ELEPHANTIASIS NOSTRAS: REVIEW OF THE SUBJECT WITH REPORT OF A CASE.

By Joseph A. Elliott, A.B., M.D., Ann Arbor.

Resident in Dermatology and Syphilology, University of Michigan.

(From the Laboratory of the Department of Dermatology and Syphilology, University of Michigan.)

According to the literature, elephantiasis nostras is a relatively rare condition as found in this country; in certain parts of Europe, however, it is less rare. For the most part the cases that have been reported were observed in England and France, while a smaller number have been reported by German observers. Farvarger,[1] however, thinks the condition extremely rare in Austria.

The first case to be reported was that of Kennedy,[2] in 1819. This author had observed a case in Madras several years previously with enormous enlargement of the left arm. A history was obtained of severe injury which became secondarily infected, followed by recurrent attacks of erythema and progressive enlargement of the part. In the same year Chevalier[3] reported a case with permanent enlargement of the leg, following an attack of phlegmasia alba dolens. Since that time cases have been reported in the English literature by Southam,[4] Frances,[5] MacGregor,[6] Whitehead,[7] Barber,[8] Daniels,[9] McDonagh,[10] Adamson,[11] Pringle,[12] Sequeira,[13] and others.

In the American literature, Busey[14] published two monographs, with a review of a large number of cases of all types, having particular reference to the part lymphatic occlusion played in the production of elephantiasis. More recently cases have been reported by Allen,[15] Griffith,[16] Hastings,[17] Shattuck,[18] Winthrop,[19] Thompson,[20] Heidingsfeld,[21] and Robinson.[22]

The following case was recently observed in the Department of Dermatology and Syphilology of the University of Michigan.

Case Report.

The patient, an American-born girl, 19 years old, entered the University Hospital, complaining of enlargement of the left arm and hand. Her mother was born in Norway and her father in Finland; both are living and in good health. She has had the usual children's diseases, with good recovery. Eleven years ago she was vaccinated, following which she was in a hospital for three months with a very sore arm. At the site of the vaccination a large ulcer developed, and at the same time the arm became greatly swollen, with a wide zone of erythema surrounding the ulcer. The ulcer healed, however, at the end of three months, and both the erythema and swelling entirely subsided. Eighteen months ago she had an attack of appendicitis with operation, which was followed by

a rapid and uneventful recovery. Menstruation began at the age of fifteen years and has been regular.

The present trouble began about fourteen months ago, when she noticed that the left hand began to swell, without any previous trauma. The skin was slightly reddened and felt warm to the touch. The swelling gradually progressed up the arm until the elbow was reached. At first there was no pain associated with the swelling, but later pain occurred in the fingers, elbow and shoulder. The erythema recurred at short intervals; the swelling, however, persisted from its inception, and did not subside to any noticeable extent between the attacks of erythema. Only a short while after the swelling appeared, it was noticed that sensation was slightly decreased in both the arm and hand. At the same time the arm became mottled in appearance.

The patient is a very tall young woman of slender build. Her general appearance is that of a healthy young woman. The scalp shows a mild seborrhœic dermatitis. The pupils are equal and react to light and accommodation. The skin of the face and body shows a marked vasomotor disturbance while the patient is being examined. The mucous membranes, glandular system and spleen are negative. Physical examination is negative. Wassermann negative. Urine negative. Blood count normal.

The left upper extremity shows a diffuse symmetrical enlargement beginning at a point six inches below the achromion process when measured over the shoulder. From this point the normal dimensions gradually increase until the hand is reached, where the greatest enlargement is observed. It stops very abruptly, however, at the distal ends of the first phalanges, and from this point the fingers emerge, normal in size, from the pouch-like enlargement (see Figs.). The skin over the upper part of the arm is practically normal, and shows no distinct thickening; however, as the forearm is approached the swelling appears more pronounced, and there is definite thickening of the skin, which increases as the hand is reached. Over the back of the hand the swelling is very marked, giving it a "puffy" appearance. The skin over this region, as compared with that of the other hand, is about twice as thick, is much firmer, and is distinctly

dry and rough to the touch. While greatly thickened, it is not fixed to the underlying structures. The skin over the fingers is firmer, and very firmly attached to the deeper structures, feeling almost sclerodermatous. Over the middle and forefinger especially, there are numerous small nodules, which are boardlike in their firmness and give one the impression of fibroid tumor.

The entire arm is of a dusky red color, interspersed with small depigmented spots, giving it a mottled appearance. In these lighter areas there is almost complete anæsthesia to pain. The patient, however, exhibits a somewhat decreased sensation over the entire body. The epidermis is roughened and covered with a slight scaliness. The hair follicles are depressed, and in places the skin is thrown into minute folds. Both on the back of the hand and on the palm there are numerous wart-like lesions, varying in size from a pinhead to that of a split pea, having the color of the surrounding integument. When incised, a small amount of lymph is poured out from the incision.

Histopathology.

For pathological study a biopsy was done, one specimen being taken from the back of the hand, including a warty growth, while the other

was taken from the finger where the fibrosis was most marked. The tissues were fixed in formol and alcohol, imbedded and cut in paraffin. Stains employed were hæmatoxalyn and eosin. Unna's polychrome methylene blue, orcein, both neutral and acid, and Pappenheim's plasma cell stain.

The epidermis shows only slight changes, a slight thickening being noted, particularly in the sections from the finger. The horny layer is about twice as thick as normal, loosely aranged, and in the upper layers there are a few unfinished horn cells. The rete has a slight increase in number of cells in most places, while in others there is a pressure atrophy. There is neither inter- nor intracellular epidermal œdema, and with the exception of the slight hyper- and parakeratosis, the individual cells of the epidermis appear to be perfectly normal.

The corium is the site of very marked pathological changes, the most striking of which is a tremendous increase in collagen. This is normally placed but greatly hypertrophied, being thrown into large bundles and whirls, and extending so far into the depths of the cutis as to replace much of the subcutaneous fat. Around the deeper blood vessels and sweat coils it shows a decided myxomatous and hyaline degeneration. Mast cells are extremely numerous, and seem to be more in evidence where the collagen has undergone the greatest degree of hypertrophy,—that is, in the deeper portions of the corium. These cells are pressed out into almost twice their normal lengths, being situated beteween the collagen bundles. In places, however, where pressure is exerted from different directions, they have assumed polygonal shapes. The papillæ are flattened out, and are rather far apart. The elastic tissue is decidedly decreased in amount. In the sections studied, hair follicles and sebaceous glands were lacking. There is an apparent increase in the sweat coils.

The blood vessels show some very interesting changes, the most marked of which occur in the arteries. The larger arteries show marked thickening as a result of proliferation of the endothelium, together with an increase in the thickness of the media. In places this thickening has progressed to such a degree that the larger arteries have very narrow lumina, while the arterioles and capillaries show typical obliterative endarteritis. A similar change, but to a lesser extent, has taken place in the media of the veins, with but little change in the intima. The walls of the larger veins are sclerosed to the extent that they remain patent. Around all of the vessels there is a marked infiltrate, which for the most part consists of small round cell lymphocytes, with a good many polynuclear leucocytes and some mast cells. The mast cells, however, are no more prominent here than they are throughout the entire section. There are no plasma cells present. The lymph channels are markedly dilated, but show no appreciable thickening. The dilatation is perhaps more marked in the upper part of the corium. With Unna's polychrome methylene blue, cocci were demonstrated in small clumps around the vessels, just beneath the epidermis.

In arriving at a differential diagnosis in this case, three possibilities were considered: 1, Leprosy; 2, Acute scleroderma; 3, Elephantiasis nostras.

In considering the diagnosis of leprosy there were several factors which favored it. In the first place there was the general appearance of the skin, the mottling being particularly common in the maculo-

anæsthetic form of leprosy, while the anæsthesia was also suggestive. The nodules on the fingers, taken into consideration with the Finnish parentage, were again suggestive. Against this diagnosis was the localization without any other involvement, the absence of enlargement of the ulnar nerve, the partial instead of complete anæsthesia, the relatively small amount of pain, and the short duration with such progressive enlargement. These factors alone sufficed to rule out that diagnosis, which was later borne out by the pathological findings.

With regard to acute scleroderma, this condition, according to Stelwagon,[23] is ushered in by a more or less œdematous infiltration with or without constitutional symptoms. The skin is tense and glossy, and in some instances may pit on pressure. The integument rapidly becomes hard and fixed to the underlying structures, while the œdema rapidly disappears. As soon as the œdema has disappeared the glossiness is replaced by a harsh, slightly pigmented epidermis, covered with a slight scaliness. In some instances there are small warty outgrowths present, especially when the lower extremity is involved.

It can readily be seen that some phases of the case reported herein are similar to acute scleroderma; however, there is fixation only over the fingers, while other portions of the skin are freely movable. The hand and arm remain greatly swollen, the warty growths when incised contain lymph, and the recurrent attacks of erythema are all factors against such a diagnosis. Again the pathological picture clearly rules out such a possibility.

The ætiology of elephantiasis nostras was not definitely known until Sabouraud[24] published the results of his work in 1893. In a series of five cases he was able, by scarifying the skin during an erysipelatous attack, and culturing the blood and serum thus obtained, to demonstrate pure cultures of streptococci. All cultures taken between attacks, on the other hand, remained sterile. Since his work was published there has been much speculation as to whether tropical elephantiasis might not also be of bacterial origin. Prout[25] has been one of the champions of this idea, and states that in his opinion both the sporadic and endemic forms of elephantiasis are due to the streptococcus. Dubruel[26] seems to agree with Prout, as he concludes, after several years' study in the tropics, that the tropical form should be more closely allied to the sporadic form, and considered contagious during the erysipelatous attacks. He reached this conclusion after examining a number of the inhabitants of the Island of Moorea, where about 12 per cent. of the entire population are afflicted with this malady. He was able to demonstrate the filaria in only one case, while in many he found the strepto-

coccus in pure culture or in one or two cases associated with staphylococci. Powell[27] and Megaw[28] both report similar results. While working in Bombay, Powell was unable to find filaria in a single one of seven cases afflicted with elephantiasis. On the other hand, he found 5 per cent. of a large number of the inhabitants examined to be infected with filariasis who were free from elephantiasis. Megaw examined 100 prisoners, three of whom had elephantiasis. Fifteen of the entire number were found to be infected with filaria, while all of the cases of elephantiasis were negative to filaria on repeated examinations. Manson[29] still holds to his view that filaria is the essential factor in the production of the tropical type, explaining the presence of bacteria in the blood stream, by the assumption that the filaria, by injuring the lymph vessels, predisposes to bacterial infection, the latter causing the lymphangitis and fever.

Disregarding the tropical type, it is definitely established that a majority of the sporadic cases are directly caused by the streptococcus. McDonagh[10] believes, however, that syphilis may also be a direct cause, and cites a case to prove his point. The patient had a non-ulcerating tertiary lesion on the scrotum which was followed by elephantiasis. After very careful search he concludes that streptococci are not present, and that the condition is caused by syphilis. He also cites seven cases reported by Frances[5] and one by Adamson,[11] where the patients had luetic lesions followed by elephantiasis. In each of Frances' cases there were ulcerations which were the probable portals of entry for the streptococci. On the other hand, an abrasion is not necessary, as many cases occur spontaneously, according to Sabouraud.[24]

The ætiology, while definitely agreed on by all, has been substantiated by very few. Sabouraud, as previously referred to, did the initial work in demonstrating the streptococcus of Fehleissen in his cases. Most observers who have reported cases since that time agree that their cases are undoubtedly of streptococcic origin, but they have failed to make either pathological or bacteriological studies. The sections studied in my case were biopsied during an attack of erythema and showed numerous cocci. Shortly afterwards, treatment was instituted and the erythema rapidly disappeared. At this time, cultures were taken which remained sterile. This finding agrees with that of Sabouraud,[24] inasmuch as all of his cultures remained sterile when taken during the non-erythematous period. The organisms found in the sections were in clumps, but occasionally a very short chain could be seen, consisting of from two to three cocci. For the most part they were seen just beneath the epidermis, situated around the blood vessels and lymph channels, and especially where the infiltrate was most marked.

The symptomatology of elephantiasis nostras, according to Brocq,[30] is characterized by recurrent attacks of erythema of the affected part. In some instances the initial attack is severe, and associated with general malaise, anorexia and fever. There is a marked œdema with a definite lymphangitis, while the neighboring lymph glands are enlarged and painful. The inflammatory reaction of the skin subsides within a few days to a few weeks; the œdema, however, tends to persist. The attacks recur at frequent intervals, until finally the œdema persists from one attack to another. In the mean time there has been a marked hypertrophy of the connective tissue and true elephantiasis is established. In many instances, however, as in the case reported, the constitutional symptoms are lacking, and only the œdema with the recurrent erythema is noticed.

Most of the cases reported have had recurrent attacks of erythema. A few have had severe attacks, while a majority have had mild ones, and still others have been so mild as to be scarcely noticeable. Daniels[9] is the authority for the statement that elephantiasis can occur after a single attack of erythema, after repeated attacks, or without erythema at all.

Pain seems to be the second most constant symptom, varying between wide limits as to its severity. In the cases reported by Southam,[4] Bryk[31] and Whitehead[7] it was extremely severe. In Southam's case it was necessary to keep the patient continually under the influence of opiates. In contrast to this, pain was a mild symptom in the cases of Chevalier,[3] Kennedy,[2] Jackson,[32] Thompson,[20] Robinson,[22] Breakey,[33] and others. Sabouraud[24] states that it was absent in his cases. While pain is usually an early symptom and associated with lymphangitis, it may occur late in the disease, and when present is usually constant and of a dull, aching character. A probable explanation for this lies in the fact that the connective tissue has hypertrophied to such a degree that the nerve endings are pressed upon. In my case the pain in the fingers did not appear until the sclerosis was very marked, and the above explanation seems easily plausible.

The general pathological picture in the writer's case conforms to that generally accepted as typical. A few important findings, however, differ materially from those of other observers. In the first place, plasma cells are described by Unna[34] as being present in large numbers, situated around the blood vessels, while mast cells are numerous but not abundant. In our sections plasma cells were practically absent while mast cells were very abundant. Again, the elastica was decidedly decreased, which has not been found in the experience of most observ-

ers, but emphasized by Unna as being very apparent in his experience.

There has been much discussion as to the primary pathological change in the production of elephantiasis. It was thought by Neiden,[35] Virchow,[36] Winiwarter[37] and others that the lymphatics were first involved, leading to stasis, œdema and hypertrophy. Cohnheim[38] after extensive experiments, proved that lymphatic obstruction alone could not produce stasis and œdema, but that there must be a hindrance to the outflow of venous blood to produce these changes. Unna[34] states that while stasis is undoubtedly present, according to all experimental histology, we must seek the cause in the veins rather than in the lymphatics. He quotes Winiwarter as describing thrombosis of the veins, but not regarding the fact as of significance in the production of stasis. It is very evident, in the writer's case, that the blood vessels were primarily involved, as is evidenced by the marked thickening of their walls, the endothelial proliferation, and the extensive infiltrate surrounding them. The lymphatics, on the other hand, are markedly dilated, but show no appreciable thickening: however, there is some infiltrate surrounding them.

The treatment instituted in this case was baking the hand and arm in an arthritis oven, for thirty minutes daily, followed by vigorous massage with petrolatum. The patient was given weekly intramuscular injections of antistreptococcus serum. Under this treatment the erythema disappeared, and the arm and hand had reduced about one-third in size when the patient left the hospital.

CONCLUSIONS.

1. A large majority of the cases of elephantiasis nostras are due to the streptococcus of Fehleissen.
2. The primary changes are in the blood vessels rather than in the lymphatics.
3. The secondary changes are lymph stasis, œdema, a marked hypertrophy of collagen with an infiltrate of small round cells and some polynuclear leucocytes.
4. Leprosy and acute scleroderma are to be considered in the differential diagnosis.
5. The streptococcic origin of the disease suggests that the local measures might well be augmented by antistreptococcic serum in the treatment of the disease.

It is with pleasure that I acknowledge the kindly criticism as well as the able assistance rendered me by Prof. Udo J. Wile in the preparation of this paper, and the departmental facilities he placed at my disposal.

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A CASE OF EPIDERMOLYSIS BULLOSA, SHOWING LOSS OF ELASTIC TISSUE IN THE APPARENTLY NORMAL SKIN.

By Richard S. Weiss, M.D., St. Louis.

[From the Department of Dermatology, Washington University Medical School.]

Cases of epidermolysis bullosa* are sufficiently rare to be worthy of record at all times, but this case is particularly so, as the histopathology of the apparently normal skin is of very great interest.

Case Report.

The patient was a white male, aged 26 years. Clinic No. 19859. He presented himself to the Skin Clinic of the Washington University Dispensary on Jan. 14, 1916, complaining of an eruption of blisters on the legs.

His family history has no bearing on the case. His previous history, habits, etc., are apparently irrelevant. There is no history of any chronic skin condition and he states that, to his knowledge, no one in the family has ever had anything resembling his condition.

The present trouble began at birth, since which time he has always had more or less of an eruption of large or small bullæ, or the results of the involution of bullæ, and in the past twenty years or so, a progressive disease of the nails.

The patient is a well developed white male, weighing about 135 pounds. A general physical examination reveals nothing abnormal in the chest or abdomen.

The lesions on the skin are well marked and will be described in detail.

The skin over the elbows shows very marked papery atrophy and the patient states that he has had bullæ there on numerous occasions, but not lately.

Several of the finger nails show very marked dystrophic changes.

The legs, from a few inches below the knees almost to the ankles, show very marked lesions. These are of three types: first, several bullæ, 1 to 3 cm. in diameter, all filled with a serous fluid; secondly, yellowish crusted lesions where the bullæ have ruptured and become secondarily infected; thirdly, scarring and atrophy of the skin.

All of the toenails show marked dystrophic changes.

The skin covering the rest of the body is apparently normal. There are no lesions in the mouth or nose nor is there any evidence of intestinal involvement. There are no milium-like lesions anywhere.

The patient states that it requires quite severe trauma to produce a lesion, and no attempt was made to elicit experimental ones.

A small piece of the apparently normal skin of the arm was removed (without anæsthesia), for histological study. This was sectioned and stained with the usual stains. (It is worthy of note that some two weeks after the small biopsy wound had healed, a bulla about 2 cm. in diameter suddenly appeared, involving the scar and the skin around it.)

* For a complete description of this disease, with a review of the literature and bibliography, see article of Wise and Lautman, *Jour. Cutan. Dis.*, 1915, xxxiii, p. 441.

Histopathology.

The epidermis is practically normal, there being in a few places a suspicion of slightly more than usual succulency. The granular layer is somewhat thickened.

There is quite marked œdema of the derma. The lymph spaces are dilated. The blood vessels also are somewhat dilated. The principal interest lies in the elastic tissue. In the skin of normal individuals we find that the subepidermal mosaic of elastic tissue fibrils sends out tiny threads which weave themselves between the basal cells of the epidermis and serve to bind this layer to the derma. These binding threads are here, for the most part, missing. There is some elastic tissue above the subpapillary plexus but it is very scattered, and in some small areas, entirely wanting. The fibres that are present show no degeneration; they are only torn by the œdema. The loss of elastic tissue is quite marked around the hair follicles. In many of these places, just underneath the epidermis, the elastic tissue is entirely missing, and the bundles below are short, thick and distorted. The deeper portions of the derma show the elastic tissue in practically normal distribution but the fibres are shorter and thicker and not so wavy.

There are no follicular or glandular changes.

There is no evidence of inflammatory reaction.

Summary and Conclusion.

A case of epidermolysis bullosa is described, lacking hereditary or congenital features, but showing loss of and changes in the elastic tissue of the apparently normal skin.

This anomaly was first reported by Engman and Mook[1] and later confirmed by Kanoky and Sutton.[2]

The opinion of Engman and Mook, that the probable ætiological factor in epidermolysis bullosa is the diminution or absence of elastic tissue, is again confirmed.

This case is from the service of Dr. M. F. Engman, to whom I am indebted for permission to report.

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SPECIAL ARTICLE.

HISTOPATHOLOGY.

(*Continued from September number, page 664.*)

By Walter J. Heimann, M.D., New York.

(From the Department of Dermatology and Syphilology, College of Physicians and Surgeons, Columbia University.)

Chapter VII.

The Lichens: Lichenifications and Neurodermitis.

Lichenification, a term introduced by Brocq, is a process identical with that which Besnier[1] in 1892 designated as lichenization. It is a consecutive cutaenous phenomenon developing upon prepared soil in individuals suffering with an itching dermatosis. Neurodermitis (Brocq) is a thickening of the skin developing in a fairly characteristic manner, in definite localities, independent of any preëxisting skin disease. Pruritus precedes its appearance, as a rule, a fact which has caused Brocq[2] to adopt another appellation, namely, circumscribed pruritus, with lichenification. Thus, neurodermitis is a primary skin disease. It is evidently the same condition, one form of which Willan originally called lichen simplex and Vidal lichen simplex acutus; and another form of which Rayer called lichen circumscriptus and Vidal, lichen chronicus circumscriptus. (See Chapter V.) Secondary lichenification may occur anywhere and it has no definite outline, while neurodermitis occurs at relatively typical sites, and possesses a characteristic aspect. The former is a thickening of the skin; so is the latter. The former is consecutive to a preëxisting dermatosis; the latter to prodromal itching. Both depend upon predisposition, a fact unanimously conceded. The German and English schools consider neurodermitis a chronic eczema. This is undoubtedly wrong. Neurodermitis is no eczema, but a disease *sui generis*. Neither is lichenified eczema pure eczema (see Chapter VIII.), but a distinctive consecutive lesion. Whether lichenification arises in eczema, scabies, prurigo, dermatitis herpetiformis, or in connection with any other disease, it remains the

same. We cannot distinguish lichenification following eczema from that following prurigo, any more than we can distinguish between impetigo developing in the course of eczema and impetigo developing in the course of prurigo. Precisely the same principles apply to lichenification which apply to all other consecutive lesions. They are purely generic and in no sense individual.

Neurodermitis presents a much more distinct clinical picture than does lichenification, but microscopically they are alike. It is not within the province of a work on histopathology to enter exhaustively into the clinical aspects of diseases, but it is well worth while to study Brocq's,[2] Besnier's[1] and Török's[3] precise views on the subject at hand. We in England and America share equally with the Teutons a gross and unenviable neglect of this chapter of dermatology. It is exactly twenty years since Brocq finally clarified the entire question, and we still think only of verrucous lichen or chronic eczema when we see a patch on the skin which in France would promptly be recognized as neurodermitis.

Brocq, himself, makes no far reaching distinctions between primary and secondary lichenification, but for the sake of clinical accuracy he has entirely separated them from the lichens. He and Jacquet[2] originally employed the name *neurodermite* to characterize primary lichenification because of its association with extensive itching and nervousness, but without any desire to imply an immediate causal involvement of the central or peripheral nervous system. It is for this reason, too, that he subsequently abandoned the term as misleading, and substituted pruritus with lichenification. Whatever the clinical and ætiological differences between the two, their minute structure, as has been stated, is the same.

Primary lichenification is also called lichen chronicus simplex (Vidal) and pseudolichen (Tommasoli). It occurs in the varieties mentioned by Brocq, in a verrucous form (Kreibich[4]), in a nodular form (Brocq), further described by Fabry,[5] and finally in a linear psoriasiform arrangement, a fact which Vignolo-Lutati[6] points out. In none of these special clinical types has any essential variation from the usual microscopic picture been found.

THE HISTOLOGY OF PRIMARY AND SECONDARY LICHENIFICATION.

Unna in his histopathology and in Ivan Bloch's volume entitled, "Unna's Lehren," Ehrmann in Riecke's text book on skin diseases, and Joseph in his text book, all refer to lichen simplex as a form of eczema and state that its histopathology is one with that of the latter disease. Ehrmann identifies the process of eczematization with that of lichenification or lichenization. This author, with Fick,[7] asserts in so many words that the disease microscopically

corresponds with chronic eczema, a flat mistake, as will be shown in CHAPTER VIII. Kreibich,[8] on the other hand, whose viewpoint in general is not servile to Viennese tradition, enthusiastically accepts Brocq's views.

Brocq,[2] for whom Dalous studied the structure of lichenification, finds a hyper- and parakeratosis, acanthosis, vascular dilatation in the papillary body, and islands of proliferated connective tissue cells. Jacquet[3] emphasizes a lymphatic dilatation in the cutis with œdema of the collagen, largely restricted to the perivascular areas in the papillæ. In the epidermis, in addition to the features mentioned, he reports *altération cavitaire*, a normal granular layer, and the presence of migrated leucocytes. Darier[9] emphasizes a regular elongation of the papillæ, which contain infiltrations. Vignolo-Lutati[6] vividly describes these changes in the papillæ, referring them back to a pronounced and uniform elongation of the pegs (Fig. 1), which are not, however broadened. The stratum corneum is not markedly thickened, nor are any of its cells nucleated (Fig. 4). The granular layer is discontinuous, but not otherwise modified. *Altération cavitaire* is present and the basal cells are slightly disturbed in arrangement. Low down in the corium, aside from the increase in the number of lymphoid cells, there are no changes. The papillæ, however, are lengthened to conform to the pegs, their vessels are dilated, and a hyperplasia of fibroblasts is found. Among these, numerous infiltrating lymphocytes are deposited. Kreibich[8] finds acanthosis, parakeratosis and intracellular œdema, but points out that these epidermal features are less significant than the metamorphoses which the corium and papillary body undergo. In young lesions the papillæ are congested, and there is a trifling infiltration of round cells. Later the collagen swells, looks glassy and then broadens. A lymphœdema involves this entire structure, and there takes place a subepidermal fluid accumulation (Figs. 1 and 3). In maturer lesions still, parakeratosis, elongation of the pegs, clubbing (Fig. 4) of the papillæ and "stabile hypertrophy" of the collagen are observed.

Lichenification presents a very striking microscopic aspect. When seen under low magnification it appears as if the epidermis and papillary body were clutching each other with long thin fingers (Fig. 3). This is due to an inordinate proliferation of the papillæ in compensation to which the pegs have grown down, so that they attain a length of from twice to thrice the normal. The majority of the pegs remain discrete and narrow, but in patches they coalesce, resembling two or three fingers held closely together (Figs. 1 and 4).

Increased magnification shows that the stratum corneum is thin, and, on the whole, not made up of nucleated cells (parakeratosis, Figs. 1 and 3). The stratum granulosum is not increased in depth and is discontinuous. The suprapapillary rete is slightly thickened, and the pegs are markedly increased in their vertical axis, accounting for their abnormal length (Fig. 3). This acanthosis is partly due to proliferation of the Malpighian cells, although the mitoses are only slightly, if at all, increased in number; but more especially to a marked intercellular and slight intracellular œdema (Figs. 1 and 3). In consequence of this the epithelial threads are put on the stretch and a few cells show Leloir's

degeneration. The germinative layer, aside from being œdematous, is but slightly disturbed. A moderate number of migrating leucocytes invade the cuticle.

The main changes are in the papillæ, the subpapillary area, and in the upper level of the reticular layer of the corium. At these sites a pronounced œdema (Figs. 1, 2 and 3) exists which does not spare even the smallest interstices among the collagenous fibres. The smaller lymphatics are all dilated so that the collagen bundles are forced apart (Fig. 2), swollen and somewhat glazed. The larger lymphatics form veritable rifts, either emptied or more or less filled with lymphocytes. Their endothelia are swollen (Fig. 2). Identical changes are found in the blood vessels (Fig. 2) from the finest capillary in the papillæ to the largest vessels in the subpapillary plexus. Their endothelial and perithelial cells are in a state of œdema and multiplication (Fig. 2), and many of the vessels are filled with lymphocytes, while the perivascular lymphatics are packed with succulent cells of the same variety. Thus, islands of infiltration are formed (Fig. 1).

The infiltration is partly diffuse and partly focal (Figs. 1, 2 and 3). In the papillæ, the former condition prevails. Here in the meshes of the œdematous collagen fibrils, are found lymphocytes, fibroblasts and an occasional mast cell, densely grouped. The cells all stain clearly. This infiltration extends down to the upper level of the subpapillary vessels where it changes in character, becoming focal (Fig. 1), because of confinement to the dilated vessels and the perivascular lymphatics, as described at the end of the preceding paragraph. These foci vary in size and shape according to the magnitude and form of the vessels involved. The non-infiltrated collagen at this level is markedly swollen, glassy, and in places hypertrophied. In the lowest depths of the corium only slight œdema of the collagen and no infiltration are present.

The elastic tissue, pilosebaceous organs, coil glands, sweat ducts and arrector muscles are undisturbed save for the mechanical effect of the œdema. Vignolo-Lutati[6] finds perineural œdema, but this has been unconfirmed. Between the papillary body and epidermis an occasional serous lake is found, as mentioned by Kreibich[8] (Figs. 1 and 3). These subepidermal vesicles contain fibrin and a few leucocytes. They are not formed by necrosis of tissue, but represent the maximum of the serous saturation noted in the papillary body, and develop at points at which the resistance of the spongy collagen fibres is lowest.

Lichenification thus is a subacute or chronic inflammation, with a tendency to connective tissue hyperplasia, associated with a productive inflammation of the epidermis as well. When this process is exagger-

ated, the lesions are prone to become verrucous. Then the papillæ club and are, of course, even longer than in the ordinary type, while the epidermis grows thick and somewhat resembles that seen in papillomas.

The chief characteristics of the disease are:

(1) Parakeratosis and hyperkeratosis.
(2) Intercellular œdema in the rete and pegs.
(3) Acanthosis in the rete and pegs, causing elongation of the latter.
(4) Subepidermal accumulations of serum.
(5) Hypertrophy of the papillæ.
(6) Œdema of the papillæ.
(7) Dilatation of all the papillary vessels.
(8) Infiltration of the papillæ with lymphocytes, fibroblasts and a few mast cells.
(9) Dilatation of the vessels of the subpapillary plexus and the lymphatics in this area.
(10) Infiltration of cells (as in 8) about the vessels forming foci.
(11) Œdema and hyperplasia of the collagen.
(12) Slight œdema in the upper levels of the pars reticularis.

The negative features of lichenification are:

(1) Absence of vesicles in the epidermis.
(2) Absence of marked hyperkeratinization or marked parakeratosis.
(3) Absence of excessive fat in the epidermis, vessels, skin glands, etc.
(4) Absence of follicular involvement.
(5) Absence of disturbance of the pilosebaceous or sweat organs.

The conditions from which lichenification may have to be differentiated are psoriasis, parapsoriasis, plaques of seborrhœa and lichen planus, and pityriasis rubra pilaris. In psoriasis the hyper- and parakeratosis are more marked. Munro's abscesses are present, the subpapillary rete is less thickened and the œdema in the corium less marked. In parapsoriasis there is thinning of the rete, interrupted obliteration of the basal layer, and at some points, coalescence of the infiltration in the papillary body and epidermis. In seborrhœa the hair follicles are involved, minute vesicles are found in the epidermis, the acanthosis is irregular and the fat distribution characteristic. In lichen planus the changes in the granular layer, the dell, lacunæ and characteristic shape of the infiltration distinguish it from lichenification. Finally, in pityriasis rubra pilaris, the follicular plug, changes in the

coils, the nature of the infiltration and the absence of changes, excepting near the follicles, will serve to prevent confusion.

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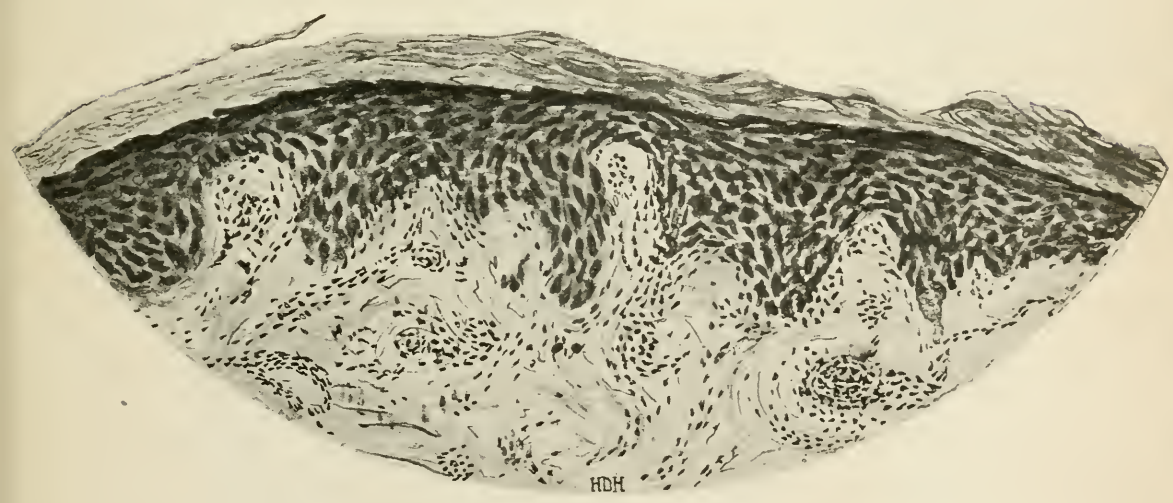

Fig. 1. Lichenification. Drawing. Zeiss, Oc. 4, Obj. DD.
Note the slightly thickened but otherwise normal stratum corneum, intercellular œdema, coalescence of many pegs, subepidermal lakes, œdema and infiltration of the papillæ, and focal infiltration in the depths.

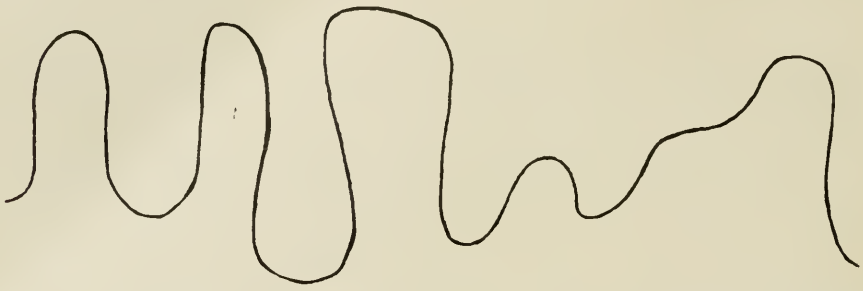

FIG. 4. Lichen simplex. Diagram. Note the elongated, clubbed and fused pegs.

(To be continued.)

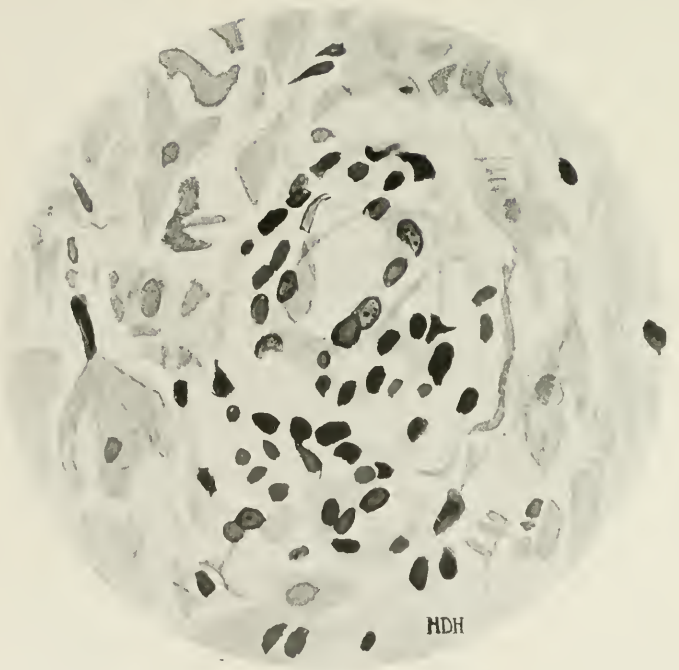

Fig. 2.

Lichen Simplex (Neurodermite). Drawing. Zeiss, Oc. 4, Obj. DD.

Note dilated blood and lymph vessels, swollen endothelia, perivascular lymphocytic infiltration, swollen and separated collagen bundles.

Fig. 3.

Lichen simplex. Drawing. Zeiss, Oc. 4, Obj. DD.

Note hyperkeratosis and small area of parakeratosis, acanthosis and intercellular œdema, subepidermal lake, infiltration and œdema of papillæ, and the elongation of the latter and the pegs.

Plate IV.—To Illustrate Article on Pathology, by Walter J. Heimann, M.D.

SOCIETY TRANSACTIONS.

NEW YORK DERMATOLOGICAL SOCIETY.

Regular Meeting, May 23rd, 1916.

HOWARD FOX, M.D., *President.*

MONILETHRIX. Presented by DR. KINGSBURY.

The patient was ten months old and at birth had apparently normal hair, but shortly afterward the hairs began to break off, and when presented the head was sparsely covered with short stumps of hair, which were lifeless and brittle.

DISCUSSION.

DR. MACKEE said that in a short examination in a poor light he was unable to find any beaded hairs, but the fact that the infantile hair fell out shortly after birth and was replaced by hair which was very brittle and broke off close to the scalp, together with the keratosis pilaris, would lead him to make a diagnosis of monilethrix. He felt quite certain that the beaded hair would be found by Dr. Kingsbury. The fact that there was no other case of monilethrix in the same family would not militate against such a diagnosis, as every family tree must have a beginning.*

DR. WHITEHOUSE agreed with Dr. MacKee that the association of keratosis pilaris and the general history of the case indicated that it was monilethrix.

SEBORRHŒIC ECZEMA. Presented by DR. KINGSBURY.

The patient was a girl, five years of age, who presented a patchy, follicular eruption of a year's duration, located on the back and in the axillæ.

DISCUSSION.

DR. TRIMBLE agreed with the diagnosis of follicular seborrhœic eczema, although he had never seen a case in such an early stage. The cases he had seen

* Dr. MacKee was indebted to Dr. Kingsbury for the opportunity of studying some beaded hairs from this patient. They were typical monilethrix hairs. Under the microscope one hair showed a large amount of medullary substance in the internodal portion of the hair, an observation not hitherto made.

had been of the subacute or chronic type, and in the latter variety one could hardly fail to make the diagnosis. This patient's lesions were as yet very mild and did not show so much oil or grease as the cases he had seen before, neither was there so much redness. He believed, however, that it was the same condition.

Dr. Whitehouse agreed with the diagnosis.

Dr. MacKee said that he was not prepared to dispute the diagnosis, yet hesitated to accept it. The spinal region and the axillæ, of course, were favorite sites for seborrhœa. On the other hand, keratosis pilaris often occurred in circumscribed, scattered areas, and he was in favor of this diagnosis. The fact that some of the lesions showed signs of involution did not speak against keratosis pilaris, because the latter disease could be temporarily improved by the use of salicylic acid, the X-ray, or other methods, and even temporary spontaneous involution was not uncommon, especially during hot weather.

Dr. Johnston also thought it was a case of keratosis pilaris.

Dr. Trimble said he could see quite a little seborrhœa about the case, only it was not equally prominent in all the affected areas. It seemed to be a very mild superficial inflammatory condition; some of the lesions, especially on the shoulder, seemed to be true scaly seborrhœic eczema, and that seemed the most likely diagnosis.

Dr. Howard Fox thought the condition corresponded to that recently described by Dr. Trimble, namely, follicular seborrhœic eczema. It certainly was not like some clear cut cases of circumscribed keratosis pilaris, in which the groups of horny follicular plugs stood out plainly upon a normal skin and one that was not at all reddened.

LYMPHANGIOMA CIRCUMSCRIPTUM. Presented by Dr. Trimble.

The patient was a young woman, twenty-four years of age, born in the United States. According to her statement, the lesion had existed since babyhood. At that time, an operation had been performed for a small tumor in the bend of the elbow. It afterward recurred, with a resulting hypertrophied scar. When presented, the lesion was situated in the flexure of the elbow, was about two by three inches in diameter, and was irregular in outline. There were also several small lesions on the forearm. The lesion consisted of scar tissue mingled with the lymphangioma. The speaker asked for suggestions as to treatment.

Discussion.

Drs. Whitehouse and MacKee suggested radium treatment.

Dr. Howard Fox called attention to a recent report of Dr. Frank Simpson who apparently had obtained a most excellent result by the use of radium.

LUPUS ERYTHEMATOSUS. Presented by Dr. Whitehouse.

Sarah K., age, 26 years. The lupus erythematosus was of the bat-wing variety, extended over the bridge of the nose and adjacent skin of the cheeks, and was rather acute, having existed for only two months. There were also a few small patches scattered through the scalp, on the lobes of the ears, and behind the ears. The patient also had a goitre of considerable soze, the thyroid having begun to enlarge thirteen years before, after the birth of her first child. The speaker said that the disease was of the type that had in his hands yielded to

the administration of iodoform, one grain three times a day, and that the case was presented because of the interest of the two associated conditions.

PREFUNGOID STAGE OF MYCOSIS FUNGOIDES. Presented by Dr. Kingsbury.

The patient was a middle-aged woman who stated that the eruption had existed for seven years, beginning with patches on the back, and which had gradually extended. The eruption was at first accompanied by a slight pruritus but the itching had increased steadily in intensity.

MYCOSIS FUNGOIDES. Presented by Drs. MacKee and Wise.

The patient, Henrietta K., from Dr. Fordyce's Clinic, was forty years of age, and was born in the United States. She presented a generalized scaly and patchy eruption extending all over the trunk, arms and legs, excepting a few small areas. It was also beginning to appear on the face, in the form of infiltrated nodules. When first presented before the Society at a previous meeting, the eruption was strongly suggestive of psoriasis, but since then the characteristic appearances had changed considerably and the diagnosis of mycosis fungoides had been established by microscopic study.

MORPHŒA (MULTIPLE LESIONS). Presented by Dr. Howard Fox.

The patient, A. B., was a woman, forty-three years of age, born in the United States. She had been married for twenty-five years and was the mother of ten healthy children, all living. No similar disease had ever been noticed in any of her family. About two months after the birth of her last child,—*e.g.*, twenty months ago,—the eruption had first made its appearance, as a single patch on the abdomen. Since then, new lesions had gradually appeared. When presented, there were twenty-two patches of morphœa, situated mostly upon the trunk. There were eleven patches upon the back, most of them upon the upper third, the rest of the patches being upon the breast, abdomen, buttocks and outer surfaces of the arms. They were rounded or oval in shape, and varied from one-half to three inches in diameter. Most of them were raised above the surface of the skin, while a few were depressed. All the patches were smooth excepting one upon the upper central portion of the back, upon which a number of blackish, pin point, horny plugs were present. All the lesions were surrounded by typical violaceous borders. There were no subjective symptoms. The patient, who appeared to be in excellent health, was a large, stout woman, weighing about 200 pounds. The Wassermann reaction was negative.

MORPHŒA. Presented by Dr. Johnston for Dr. Heimann.

The first lesions appeared a year ago near the left eye, since when the other areas had developed. The disturbance was confined to the man's face and clavicles. The diagnosis was confirmed by microscopic examination. On the cheeks, before and behind the ears, on the neck, and at the sterno-clavicular junction, were yellowish, flat, indurated patches of various dimensions. They felt hard and had a curious resistance which simulated that of a firmly elastic substance inserted in the skin.

Discussion.

Dr. Johnston said that he had suggested the use of pituitrin in these cases. He had been working with this remedy for some time, and had discussed two cases before the American Dermatological Association,—one, a generalized scleroderma, and one that would be called morphœa. The conditions had not entirely disappeared, but there was nothing left except a pseudo-ankylosis of the wrists and ankles in the boy's case, although at first he had patches ten by 12 cm. in diameter. In the second case, one patch disappeared and another was reduced to half its extent. The patients received no other medication. The dosage was determined in each individual case by the reactions. The fifteen-year-old boy took eight grains a day; it was given continuously, except that once in three months it was intermitted for a week. These patients had everything to gain and nothing to lose by the medication. One case had a glucose tolerance as high as three hundred grams.

Dr. Sherwell said that he very well remembered Dr. Johnston's remarks at the Dermatological Association on organotherapy, and that he himself had spoken of the use of pituitrin in psoriasis, with good effect. He was still using it for such conditions, with marked beneficial results in many instances; in others it seemed to do no good. He had prescribed it absolutely empirically, from analogy in the use of thyroid, giving from six to twelve grains of the Burroughs-Welcome preparation.

Dr. Schwartz told of one case at Cornell University, which he had been treating with pituitrin, but it had not yet been given long enough to report about it. The patient had a very high glucose tolerance, 250 grams. He had been taking 12 grains a day, and it seemed as though the condition was beginning to soften up.

EXTENSIVE LUPUS VULGARIS. Presented by Dr. Howard Fox.

The patient, Martha J., was a full blooded colored woman, 32 years of age, a cook by occupation. She was born in Virginia, where she had always lived until eight years ago, when she came to New York. There was no family or personal history of either tuberculosis or syphilis. Her general health had always been fairly good. The eruption first appeared four years ago, following an attack of grippe. At the same time she suffered from some nasal condition for which she received treatment for a year. The cutaneous lesions were first noticed upon the eyelids and hands. New lesions had steadily appeared up to the time of presentation, They had never caused any subjective symptoms whatsoever. The eruption was generalized upon the face, arms, forearms, hands, thighs and legs. It consisted of dull colored, firm, painless, non-ulcerating nodules, which in places had coalesced to form elevated, solid patches. The patches on the cheeks resembled those of hypertrophic lupus vulgaris. On the legs, the patches were only slightly elevated and presented more or less scaling. There was a group of small nodules below—not upon—the left eyebrow, and a few upon the ear, though not affecting the lobule. There was no change in the sensation of touch in any of the lesions on either the face or the extremities. There were two enlarged cubital glands upon the left side, but apparently no enlargement of the ulnar nerves. The Wassermann reaction was negative.*

* Subsequently two biopsies were made and tissue was stained for lepra bacilli and for the histological structure, by Dr. Heimann, who reported: "Microscopically, the picture is unquestionably that of tuberculosis. The absence of lepra cells and Hansen bacilli and the structure of the lesions, which is absolutely that of tuberculosis, rule out lepra."

Discussion.

Dr. Whitehouse said that clinically he saw nothing in the case to suggest lupus, neither did he think it was syphilis; the patient gave a negative Wassermann, but if it was syphilis with that large number of granulomatous lesions, a positive Wassermann might be expected. The lesions on the fingers, backs of the hands and eyelids suggested leprosy, as well as the facies. The woman also gave a history of having had some intranasal disturbance. He was rather inclined to believe it a case of leprosy.

Dr. Trimble also said that from a clinical examination the case seemed more like leprosy than anything else.

Dr. Howard Fox said that the patient had only recently come under his observation. He had considered three possible diagnoses—leprosy, syphilis and lupus. The fact that the patient had never lived in a leprous country was somewhat against the diagnosis of leprosy, but the complete absence of any anæsthesia or hyperæsthesia seemed to exclude this disease. The diagnosis of syphilis seemed improbable on account of the negative Wassermann, particularly in view of the extent of the eruption and the absence of previous antisyphilitic treatment. Pending a histological examination, the speaker would make a probable diagnosis (by exclusion) of lupus vulgaris.

ACRODERMATITIS CHRONICA ATROPHICANS. Presented by Dr. MacKee for Dr. Fordyce.

The patient, Emma E., was 49 years of age. The duration of the disease was fifteen years. This patient was exhaustively studied by Fordyce and reported at length by him under the title of "Symmetrical Cutaneous Atrophy with the Coincident Development of Syphilis of the Skin and Mucous Membranes," in The Journal for April, 1904. When presented by the speaker, there was a diffuse, mild erythema of the feet, legs, thighs, hands, forearms and arms. The skin was very thin and parchment-like through which the veins could be distinctly seen. Over the knees the atrophied skin was thrown into folds,—anetodermia. There were no areas of infiltration or ulceration, and there were no bullæ,—all of which had formerly been present. The patient still showed evidence of syphilis of the nervous system,—the pupils were unequal and did not respond well to light. The knee-jerks were absent. The Wassermann reaction was positive.

Dr. Wise said that he did not think the cutaneous atrophy had anything to do with the woman's syphilitic infection, but that there were two independent diseases present, which happened to occur coincidently.

LICHEN PLANUS LINEARIS. Presented by Dr. MacKee for Dr. Fordyce.

The patient, James K., was a boy, 13 years of age. The duration of the eruption was one month. The right side of the neck, the right shoulder, the right side of the chest and upper back, and the right arm and forearm were the sites of the eruption. The eruption began at the middle line, on the back and on the chest and extended as a band, about half an inch wide, to the shoulder and then down the arm to the wrist. It was absolutely unilateral. In places, the eruption consisted of closely aggregated lichen planus papules. This was especially noticeable on the back and chest. On the arm and forearm there was a decided verrucous and hyperkeratotic element. In distribution and in the verrucous character of the eruption, the disease markedly resembled an ordinary nævus unius lateris of the verrucous or hyperkeratotic variety. The

duration and the shiny, flat, umbilicated papules, in spite of the absence of pruritus, strongly suggested an unusual example of lichen planus. Several years ago, Hallopeau reported a case in which the eruption was very similar to, if not identical with, the case reported by the speaker. Hallopeau made a diagnosis of lichen planus, but later, as a result of microscopical investigation, he changed the diagnosis to nævus linearis lichenoides. Cases of lichen planus were on record where the lesions had apparently followed the distribution of the cutaneous branches of a large nerve. The adjective zosterformis had been used to designate such examples.

The histopathology of the speaker's case was that of lichen planus. There was a thickened horny layer which was almost entirely free from nuclei. The hyperkeratosis extended for some distance into the hair follicles. The granular layer was very markedly thickened. There was an acanthosis with very little intercellular œdema. Some of the prickle cells had undergone hyaline degeneration. The papillæ were broadened. The capillaries and lymph spaces of the papillary body and the subpapillary layer were markedly distended. Some of the vessels contained serum. This part of the derma was œdematous. There was a rather marked diffuse infiltration of small round cells of the lymphocytic type, which was limited to the papillary and subpapillary layers of the derma.

Discussion.

Dr. Johnston saw no reason to doubt the diagnosis. The lesions were fairly typical. The microscope cleared up the diagnosis beyond doubt.

LICHEN PLANUS ANNULARIS. Presented by Drs. MacKee and Wise.

The patient presented annular lichen planus lesions on the inner side of the left foot and on the scrotum and penis. The duration was six months. The Wassermann reaction was negative.

EPITHELIOMA OF THE TONGUE. Presented by Dr. Williams.

The patient was of Russian birth and was forty-nine years of age. The lesion began three and a half months ago, following an injury from a fishbone. The lesion presented an oval mass, one half by three fourths of an inch in area, and raised about an eighth of an inch. The whole tongue was swollen and glossy. Wassermann, 4 plus.

MELANOMA. Presented by Dr. Johnston for Dr. Heimann.

The speaker said that the patient had been X-rayed in the Roentgen Department at Cornell University some eleven years ago for a melanoma which covered the area at the left angle of the jaw. Much of the growth disappeared under treatment.

Six weeks ago the patient returned in the condition as presented. The mass had grown up like a table mountain and was jet black. The area extended an inch in front of the left ear down and well over the neck, and thence behind the ear. It consisted of macules and papules at the margin and a plateau-like, raised inner portion. Parts of the latter were oozing. Roentgen therapy had been employed, to which the erythema now seen was due.

Discussion.

Dr. Trimble said that it was a very typical and no doubt hopeless case.

Dr. Johnston said that some cases had been reported that got well. One of the patients lived for twenty years after dissection of the neck and shoulders. Dr. MacKee and he were treating a nurse with this trouble. The lesions had actually dissolved under the X-ray. There was a central lesion on the forehead and around it were six or eight other growths, characteristic in every way. As the treatment proceeded the brown color disappeared and left a steel gray pigment in the skin, disposed in small masses,—entirely different from the previous condition.

Dr. Sherwell said that he had operated on one case with the lesion in the centre of the forehead. The primary lesion was caused by a blow from a stone, many years before. The linear and adherent fibrous tissue was excised and detached from the frontal bone. The woman lived for thirty years afterward and had a healthy family. The lesion was blue, like the uveal layer of the choroid, and was increasing in size.

ELEPHANTIASIS. Previously presented by Dr. Howard Fox.

The following histological report was made by Dr. Heimann: "The microscopic structure of the lesion submitted for study shows changes in the epidermis and corium indicative of chronic œdema. In the epiderm there is a fairly marked proliferation of the rete cells, with enlargement of the pegs (acanthosis). A distinct broadening of the intercellular spaces, some œdema of the cells themselves and stretching of the threads indicates serous saturation of the epithelial stratum. In the papillary body and the lower levels of the derma are found numerous alterations. In the first place, there is a marked infiltration which is densest in the papillary region. Here it is very compact and consists almost entirely of round cells of the lymphocyte type. A few mast cells are present, but practically no plasma cells and no giant cells at all. This throws the weight of evidence against either syphilis or tuberculosis. Deeper down, the infiltration is in islands, each separate area corresponding nicely to a vessel. The infiltration is perivascular and is made up of the same elements as that higher up. The vessels themselves are increased in number. The walls are thickened and some are almost entirely occluded by swollen intima. A hyperplasia of the collagen with œdema of the fibres, a serous saturation of the connective tissue meshes, and a proliferation of fixed connective tissue cells are all present. Over the greater part of the section the epidermis is lacking and shows the typical structure of a non-specific ulceration. To sum up, the picture is that of a chronic inflammation, with marked œdema,—in other words, elephantiasis."

CHICAGO DERMATOLOGICAL SOCIETY.

Annual Meeting, January 18th, 1916.

Udo J. Wile, M.D., *President.*

FAMILIAL CYANOSIS. Presented by Dr. Harris.

Three children, nine, eight and four and a half years of age, had a history of bronchitis and whooping cough and a peculiar greenish pallor constantly present for several years. Thorough investigation had given no explanation of this color. There was no meth- or sulph-hæmoglobin in the blood and there were

no symptoms or signs of congenital heart disease. The electrocardiogram made by Dr. Herrick and shown with the cases was normal and they all had negative Wassermann reactions. They were presented for diagnosis and suggestions as to treatment. All three presented the same ashy pallor. The patients were exhibited by courtesy of Dr. Hess.

Discussion.

Dr. Harris explained that Dr. Hess had studied the cases very carefully and could not find the cause of the trouble. He found no evidence of a cardiac or enterogenous origin for the cyanosis. The color suggested argyria.

Dr. Ormsby agreed that the color might be due to a mild argyria. This should be ruled out.

Dr. Foerster suggested a resemblance to the rare condition called by Virchow ochronosis, a disorder of metabolism characterized by the presence in the urine of homogentisic acid. The translucent cartilages of these cases appeared bluish gray during life; but on section showed black. In older cases the color was still darker than blue gray. The urine turned black on standing a few hours. He suggested looking for signs of such a condition.*

CASE FOR DIAGNOSIS. Presented by Dr. Ormsby.

The patient, a man of 33 years, born in this country, stated that he had had the disease since boyhood. A few months previous to the examination, two hard tumors developed on the back, which were removed surgically, and later a similar one developed on the glans penis. He had been pigmented as long as he could remember. Other members of the family were normal.

On examination the patient presented three types of lesions: first, atrophic areas; second, pigmentations; and third, a new growth. The face, neck and hands were free. The trunk was covered with pigmented macules, varying in size from that of a pea to that of a fifty-cent piece and larger. These were practically contiguous to each other, giving a mottled aspect, and in color were a yellowish brown. The arms and legs below the knees were similarly, but less intensely, pigmented. The thighs were free from pigment. On the thighs, about the waist line and over other portions of the trunk were large areas of teleangiectasia and atrophy, which strongly suggested in appearance healed areas of radio-dermatitis. Between the scapulæ were scars, the result of the excision of tumors. On the glans was a large, indurated tumor mass. The resemblance in many areas to healed radio-dermatitis, the marked hyperpigmentation in others, and ordinary atrophy in still other areas, gave the case a striking appearance.

Discussion.

Dr. Pusey said that the areas of retiform teleangiectasis, the purpuric spots and atrophic white areas suggested Majocchi's disease, a symptom complex recently made familiar to us. The tumors, like the one on the penis, did not belong to this complex; but may easily be a sequel to the other conditions. Such patches may cause leukomatous processes which may give rise to secondary epithelioma. He had recently had occasion to consider teleangiectasis from various causes, and some of the histological and clinical pictures fell in with

* June 2, 1916, Dr. Hess reported these cases before the Section of Pediatrics at the Detroit meeting of the American Medical Association. Further study showed them to be cases of congenital heart disease.

processes like X-ray teleangiectasis. After destruction of many of the blood vessels and compensatory hypertrophy of others, a whole group of secondary teleangiectases will be found.

Dr. Wile said that he could not place this case. He had seen Dr. MacKee's case of purpura teleangiectodes as well as several others and this was not like them. There were no teleangiectatic or purpuric annular lesions. Dr. MacKee's histologic studies showed that the condition was not a real purpura; but showed dilated blood vessels with an inflammatory reaction. This was a most unusual case, not in the purpura group.

Dr. Harris remarked that the patient gave a history of the lesions disappearing when exposed to sunlight, and this observation corresponded with the fact that all the lesions presented were on covered parts. There was not a real purpura, but only a dilatation of vessels and an exudate of red cells. He asked Dr. Ormsby if the shape of the lesions changed.

Dr. Irvine thought of Majocchi's disease; but the patient claimed to have had the disease all his life. Tanning may have concealed lesions on the arms. It was too widely distributed for Majocchi's disease, and had persisted too long. He could offer no other suggestions.

Dr. Ormsby said that he felt sure the disease had been present since boyhood. The case had been treated as an ichthyosis for some years by a reputable dermatologist. The Wassermann reaction was negative. The blood showed a slight leucocytosis with ten per cent. of eosinophiles. A section of the lesion on the glans showed it to be inflammatory and not epitheliomatous. He thought purpura annularis was ruled out in view of the fact that the latter disease usually cleared up in a few years, and also as such an extensive case as this had not been recorded. There had not been sufficient time to study the histological sections. He believed the case unique.

PARAKERATOSIS VARIEGATA. Presented by Dr. Ormsby.

The patient, a man of 39 years, had had the disorder for 20 years. It had appeared at first as red spots. Scaling had been present for the last five years only. The disease seemed worse in winter.

At the time of examination there was a generalized redness with fine scaling, over the face, arms, trunk and lower limbs. The primary lesion was a small, scale-covered papule. On the trunk there was a variegated appearance due to light and dark areas. In some places teleangiectatic vessels were present. The clinical symptoms in this case resembled those in the two cases recorded.—one by Unna, Pollitzer and Santi, and the other by Fox and MacLeod. Treatment was of no avail and the general examination, including blood tests, revealed nothing of interest.

Discussion.

Dr. Wile remarked that it is impossible to say what had preceded the eruption presented. It may have been lichen planus, leukæmia or universal psoriasis. He could only suggest that it was an end result of some preceding dermatosis.

Dr. Pusey subscribed to Dr. Wile's view so far as the impossibility of telling what had caused the condition. He saw no reason, however, to think that the eruption was preceded by leukæmia or psoriasis. It may have been the primary eruption.

Dr. Stokes said that the teleangiectasis in this case did not correspond with that of the cases of generalized teleangiectasis that he has seen. In them the skin had been normal except for the dilatation of the blood vessels. In this case there was too much general inflammatory disturbance to call it a case of generalized teleangiectasis.

Dr. Ormsby expressed regret that the members did not have a better chance to examine this case and notice the small, scaly papules on the arms. The scaling was more pronounced at times than it was on presentation. Frequent washing lessened the visible scaling. The lesions were like those described by Pollitzer and by Fox and MacLeod. In the latter, the speaker had assisted in the histological work. He hoped soon to have the sections to present to the Society. There was a vast difference in clinical appearance between this and pityriasis lichenoides chronica.

PARAPSORIASIS GUTTATA. Presented by Dr. Stokes.

The patient, a man about 30 years of age, had had the eruption six years. Before treatment it was more profuse than at the time of presentation. Autoserum injections cleared up the lesions for a time, strong chrysarobin ointment also cleared them up temporarily, and the patient had had one spontaneous remission for several months, until a severe attack of tonsillitis was followed by a recurrence. Intramuscular and intravenous injections of salvarsan had had no effect whatsoever.

Discussion.

Dr. Eisenstaedt noticed a resemblance between this case and one shown at one of the meetings last year, which could easily have been mistaken for lues.

Dr. Irvine said that he had had a case of pityriasis lichenoides chronica, of 24 years' standing, that improved under white precipitate ointment, then recurred in a different form, resembling lues.

Dr. Mook said that in St. Louis they had had several cases of parapsoriasis clear up on intramuscular injections of bichloride of mercury. One of them, post mortem, showed syphilitic deposits in the aorta and elsewhere. The Wassermann reaction had been negative during life. They thought that other cases might also prove luetic.

Dr. Wile subscribed to the good effect of mercury in these cases. He had a case of syphilis which cleared up on treatment and showed a negative Wassermann. The patient then returned with pityriasis lichenoides chronica. He expressed his dislike of the name and his doubt that the disease belonged to the parapsoriasis group.

Dr. Ormsby said that he had demonstrated a patient before the Society, on and off, for the past ten years, who was suffering from the guttate variety of parapsoriasis, or the so-called pityriasis lichenoides chronica (Juliusberg). Last year this patient's lesions had been cleared up with novorobin, but had recurred. He had previously been treated with X-rays, cacodylate of sodium, chrysarobin and many other remedial agents, without benefit. Novorobin had not been used recently on account of inability to procure the drug.

Another case of the Brocq type, which had been suffering with a coincident amœbic dysentery, was treated with two injections of salvarsan, after which the parapsoriasis cleared up. The injections of salvarsan had had no effect on the dysentery.

LUPUS ERYTHEMATOSUS. Presented by Dr. Shaffner.

The patient was a young woman of nineteen years, with innumerable, split pea size lesions of lupus erythematosus, showing central atrophy and scaling, located on the face, back, scalp and hands. The lesions on the back were especially typical and numerous. The patient gave a history of a previous attack several years before, which cleared up entirely; even the areas of alopecia became covered with hair and remained so until the time of presentation.

Discussion.

Dr. Pusey considered it a very interesting case because of the lesions on the hands and the history of the eruption clearing up entirely and then recurring.

Dr. Shaffner presented the case especially because of the extensive eruption and the history of a previous attack which cleared up entirely. The patient's statement that the areas of alopecia were replaced by hair growth was obviously questionable.

SCAR SUGGESTING NÆVUS ANÆMICUS. Presented by Dr. Harris.

The first patient was a man of 23 years, with a circular white patch on right scapular region, resembling scar tissue.

NÆVUS ANÆMICUS. Presented by Dr. Harris.

The patient was a Polish girl of about 18 years, with a white area of irregular shape, one and one half by two and one half inches in diameter, in the median line of the lower dorsal region. The patient was unaware of its existence.

Discussion.

Dr. Pusey said that the white area on the man's back showed textural changes in the skin, not simply a lack of vascularity. Of course in other nævi we can have changes in all the structures of the skin, so that it was difficult to say that it was impossible in nævus anæmicus; but this one looked more like a very superficial scar.

Dr. Harris said that he was not certain of the first case shown, but that the second case, the girl, had a typical nævus anæmicus, an ivory colored spot of irregular shape which remained pale when the surrounding skin was reddened by irritation.

POST-VACCINIAL ERUPTION. Presented by Dr. Harris.

The patient was a boy of eleven years, with a generalized bullous eruption that appeared two weeks after vaccination and had lasted eleven months. In addition to the bullæ, there were circinate and gyrate erythematous lesions, and as the eruption faded, a marked pigmentation was left. Itching was marked. The blood showed an eosinophilia of 13%.

Discussion.

Dr. Pusey thought that there were here definite grounds for the diagnosis of dermatitis herpetiformis; these were the configuration of the lesions, the mental brightness of the patient, the fact that the eruption itched intensely, the pigmentation and the ease with which some of the cases were controlled by arsenic. There was no doubt of the association with vaccination, but to describe it as a bullous dermatitis following vaccination was simply hedging. He would come out flat footed and call it dermatitis herpetiformis. Bowen described an epidemic associated with foot-and-mouth disease. There was another type that was purely a bullous impetigo following vaccination. He had such a case which cleared up in ten days under antiseptic treatment. These cases may give us a clew to the ætiology of dermatitis herpetiformis.

Dr. Zeisler said he did not believe that it was dermatitis herpetiformis, because the latter was multiform and chronic, while these cases were monoform and acute.

Dr. Mook said he had had several cases. Some of these cases presented an eczema-like dermatitis developing within 30 or 40 hours, and later a few bullæ appeared. Some of the latter showed concentric rings like herpes iris. Dr. Schamberg controlled his cases with arsenic; 60% of Howe's cases died. Bowen and others have reported fatal cases in children, and several of Dr. Mook's own cases, one of which followed an unsuccessful vaccination, died.

Dr. Ravogli said that he had a case of generalized bullous eruption following vaccination, which soon cleared up; but the patient had later all the symptoms of dermatitis herpetiformis. Staphylococci were cultured from this case and an autogenous vaccine made; but after many injections it had shown no result up to that time.

Dr. Corlett remarked that these cases most frequently occurred in debilitated children whose vaccination was not well cared for. The Staphylococcus albus or aureus was sometimes found in the lesions. The cases varied a great deal, but he regarded them as distinct from dermatitis herpetiformis and pemphigus, not due to local infection.

Dr. Pusey reminded Dr. Corlett that he had reported bullous erythema multiforme after gunshot wounds and local infections.

Dr. Corlett responded that a streptococcus was found in that case.

Dr. Harris remarked that when the case presented came into the hospital, the lesions did not resemble dermatitis herpetiformis in that they were grouped. As to the pigmentation, any dermatitis lasting for eleven months would leave pigmentation.

CASE FOR DIAGNOSIS. Presented by Dr. Stillians.

An Italian woman of 28 years, who had been in this country only 3 years, had had the tumor on her left cheek for 6 years. It was a soft, dark brown mass, about two by one and five tenths cm. in size, projecting at least five tenths cm. above the surface. Under the diascope the color was a lighter brown.

Discussion.

Dr. Ravogli believed it an angioma.

Dr. Ravitch thought that it might be an angioma or it might be lupus.

Dr. Corlett made a diagnosis of lupus vulgaris, hypertrophic and circumscribed.

Dr. Pusey asked if granuloma pyogenicum had been ruled out.

Dr. Wile would rule out granuloma pyogenicum because in that condition one had a pedunculated, oozing tumor resembling certain forms of sarcoma. There was nothing in this case to suggest granuloma pyogenicum. He thought that lupus valgaris could not be ruled out.

Dr. Mook thought it lupus vulgaris.

Dr. Harris was reminded strongly of sarcoid.

Dr. Stillians said that while he thought at first of granuloma pyogenicum, he granted that there was much to suggest lupus vulgaris. He thought that granuloma pyogenicum which was not so seldom sessile and dry, could be ruled out only by a histologic examination. He promised to present a specimen from this case at a later meeting.*

*Histologically lupus vulgaris was demonstrated in the sections.

MYCOSIS FUNGOIDES. Presented by Dr. Quinn.

A girl of nineteen years had had the disease for the past three and a half years. It appeared on the back, three weeks after an attack of scarlet fever. Two years later it was treated with X-rays for five months and the lesions disappeared. On their recurrence, she was given Fowler's solution for about eight months, then an injection of salvarsan. Ten days later the lesions became much worse and spread all over the body. She presented lesions in all stages.

Discussion.

Dr. Corlett regarded it as a well marked case of mycosis fungoides.

Dr. Harris remarked that this case was shown at the Chicago meeting of the American Dermatological Association as a case of mycosis in the premycotic stage.

Dr. Quinn presented the case mainly to ask the prognosis.

PITYRIASIS RUBRA PILARIS. Presented by Dr. Zeisler.

The patient was a little girl with a well marked and characteristic general eruption of Dévergie's disease.

Discussion.

Dr. Mook said that they had a case of pityriasis rubra pilaris that did well on thyroid extract.

Dr. Zeisler replied that the case presented had already shown a slight improvement on thyroid medication.

CASE FOR DIAGNOSIS. Presented by Dr. Harris.

The patient was a woman of 35 years with a number of round, slightly flat, yellowish papules on the lower eyelids and near the root of the nose. They had been present for years and caused no symptoms.

Discussion.

Dr. Harris believed the case one of multiple benign epithelioma of the tricho-epithelioma type.

SCLEREMA NEONATORUM. Presented by Dr. Harris.

The patient was a baby, six weeks old, whose skin showed large areas of hard infiltration of a bluish red color. This condition had been present since birth, and affected the buttocks and adjacent part of the back and thighs. The case was presented by courtesy of Dr. Cox.

Discussion.

Dr. Lieberthal said that the case corresponded exactly to one he saw several months ago. An infant, a few days old, presented the same features on the skin with the general condition and the local and general temperature normal. Other dermatologists offered in that case the diagnosis of sclerema neonatorum. The speaker's diagnosis was scleroderma. The child recovered

gradually and was well in a couple of months. It was important to distinguish between the two affections. Scleroderma in infants was rarely followed by atrophy, and if the disease appeared during the first year it heals within a few months. Sclerema neonatorum of the œdematous as well as of the fatty variety was accompanied by general debility and sub-normal local and general temperature, and was fatal. For this reason he considered Dr. Harris' case one of scleroderma.

Dr. Pusey asked if the condition of which Dr. Lieberthal spoke was the same as the scleroderma of adults.

Dr. Lieberthal responded in the affirmative.

Dr. Pusey declared that scleroderma of infants like that of adults was unknown to him. The case presented was neither œdema neonatorum nor scleroderma. Sclerema neonatorum was due to a change in the fats. He could not see how it could be called scleroderma. Low temperature and bad prognosis were not necessary. He agreed with Dr. Harris' diagnosis of sclerema neonatorum.

Dr. Harris differed from Dr. Lieberthal. The books confused œdema neonatorum, scleroderma and sclerema neonatorum. He had recently seen three cases of œdema neonatorum, all in syphilitic children. He had seen four cases of sclerema neonatorum in the past few years, that came on soon after birth and extended over the trunk and adjacent parts of the extremities. One case in which the cheeks were involved, died. One case occurring nine days after birth, recovered. This one had a temperature of from 103° to 105° F., for weeks. During involution of the process the areas softened and became fluctuant. On incision, a cheesy material mixed with oil globules was obtained. Under the microscope, needle-shaped crystals were seen. Another case, seen at Michael Reese Hospital, went through the same involution. At the post mortem of a case at the Cook County Hospital, a fatty substance, the consistency of cottage cheese, was found. He was having it analyzed. It seemed to be either a form of fat with an excess of stearin and a lack of olein, or a disintegration of the fat with the liberation of crystals of fatty acids.

PECULIAR ACNE ROSACEA. Presented by Dr. Pusey.

The patient was a woman of 35 years of age, with a striking, deep blue coloration of the tip of the nose. When first presented to the Society, about a year ago, the color was much lighter and the bulbous swelling seemed to be of fibrous consistence. On presentation it was much darker in color and more vascular, and there was more rosacea showing on the cheeks. She had also calcareous deposits in the skin of the fingers.

URTICARIA PIGMENTOSA IN AN ADULT. Presented by Dr. Pusey.

A man of 30 years had had the eruption for eight years. The lesions had repeatedly become vesicular and the vesicles had ruptured and discharged serum, showing that they were true vesicles. Microscopic sections of one of these lesions showed an almost pure mast cell infiltration.

ADENOMA SEBACEUM. Presented by Dr. Ormsby.

This patient was a boy of eight years, with lesions distributed in the usual situation on the face. They were small, oval or rounded, reddish and brownish-red papules. There was moderate teleangiectasia and no subjective symptoms. The patient was shown to demonstrate the lack of results from treatment, of which he had been given a large amount with radium and X-rays,

with very little change in the lesions. A few had been cleared up by freezing with carbon dioxide snow. This case, in common with several others under observation during the last few years, was perfectly normal mentally.

Discussion.

Dr. Pusey said that he would not have recognized the condition if he had not been reminded of having seen the case previously. The lesions were now much smaller. The facts that they were on only one cheek and that the youngster was so bright mentally were noteworthy.

Dr. Harris remarked the peculiar brownish color of the lesions.

Dr. Ormsby said that the patient had been energetically treated with X-rays and radium with only partial relief of symptoms. Before treatment, it was a typical case. Several other cases that he had expected to present, had failed to appear. One of these, the daughter of an attorney, was also perfect mentally.

CONGENITAL LUES. Presented by Dr. Ormsby.

The patient was a girl of 14 years, with a sabre tibia on the right side and a bowed left ulna. She had also interstitial keratitis, photophobia, lacrimation and dental malformation, and was somewhat undersized. Her mentality was apparently normal. Six intravenous injections of 0.2 gm. salvarsan resulted in marked improvement of the eye symptoms.

Discussion.

Dr. Haase asked if the child had any symptoms early in life, and if the case could be considered lues hereditaria tarda.

Dr. Mitchell thought that the periosteal and tooth changes appeared too early in life to allow of the classification of the case as lues hereditaria tarda.

LUPUS VULGARIS. Presented by Dr. Stillians.

This case was a man of 74 years, with an eruption covering both cheeks and both ears and a large part of the left side of the chest, with smaller patches on the forehead, scalp, arms and back and sides of the trunk. The primary lesion was a typical apple-jelly tubercle, even with the surface of the skin. Hundreds of these are seen, discrete at the borders of the patch, confluent nearer the centre, and many located in the atrophic scars in the centre of the patches. There was no ulceration, nor had there ever been any. The patient seemed to be in vigorous health, but was a heavy drinker. The eruptions began at the age of 69, in a scar on the chest resulting from a scald. The lesions itched a good deal.

Discussion.

Dr. Corlett thought of lupus vulgaris in examining this unique case and could not but so regard it.

Dr. Ravogli expressed his belief in the patient's statement that the lupus began in a burn. This had been proven possible by experimental inoculation of tubercle bacilli and could have been done by flies. Two experimenters collected flies in a bottle and found tubercle bacilli on them in nine cases. This man might have been inoculated by flies or dirty hands.

Dr. Pusey considered it an exceedingly interesting and very rare case, showing plaques of lupus so extensive that they could be measured in square feet. Some one, he thought Dr. Ormsby, had called attention to the fact that lupus vulgaris erythematodes may develop epithelioma in the lesions without having had X-ray treatment. The speaker had had a case similar to this one, several years before. Epithelioma, which developed in the lesions, caused the patient's death. He had never been treated by X-rays.

Dr. Harris thought it not possible that all these areas were inoculated from without. The disease must have begun in one area and spread from that to the others.

TUBERCULOSIS VERRUCOSA CUTIS. Presented by Dr. Harris.

The patient was a man of 49 years, who developed lupus vulgaris on the back of his hand, 18 years ago, soon after the rupture of a ganglion. The condition persisted as lupus vulgaris until after several treatments with the quartz lamp, when the verrucous appearance which he exhibited, appeared.

Discussion.

Dr. Pusey considered it a very interesting observation connecting these two conditions of the same ætiology but of supposedly different character. He was glad to think of the two conditions as the same. He had recently treated a case of acute tuberculosis of the tip of the ear with a quartz lamp, pressed on. The lesion, though full of tubercle bacilli, cleared up readily. The quartz lamp was better than the Finsen apparatus because it was handier.

Dr. Ormsby asked whether the quartz lamp treatment had been of value in the case presented.

Dr. Harris answered that it had cured some lesions on the arm. He had presented the case because of the interesting change from lupus vulgaris to tuberculosis verrucosa cutis, after quartz lamp treatment.

CASE FOR DIAGNOSIS. Presented by Dr. Harris.

This patient was a man of about 28 years, with an eruption of nodules on the face, forearms, neck, occipital region and the lower extremities. They begin as acne-like nodules, accompanied by extreme itching. Some of them suppurated. They were scratched and became covered by blood colored crusts, and on healing left a slightly atrophic centre and a pigmented periphery.

Discussion.

Dr. Heidingsfeld said that the atrophic lesions on the forearm suggest follicular syphilide.

Dr. Pusey considered it a folliculitis resulting from a dirty sweater. Evidently the cachectic element of folliclis was wanting in this case.

Dr. Harris thought it an urticaria. The man developed red papules which itched intensely and continued to itch and to develop in spite of various methods of treatment, including autoserum injections. He believed it could be called an acne urticata.

BLASTOMYCOSIS. Presented by Dr. Ormsby.

The patient was a man of 48 years who had had the disease for over 25 years. The lesions had occupied a large part of the forearm, the entire elbow and a part of the arm, and in addition the elbow joint had been involved. The case

was shown on account of the hypertrophic development of the lesions. The hypertrophy was so marked that it presented the characteristics of an epithelioma. The histological section, however, demonstrated the fact that the entire process was blastomycotic.

Discussion.

Dr. Eisenstaedt said that the case was of especial interest because of the history that the process had begun in the elbow joint.

Dr. Ormsby added that the resemblance to an epithelioma was another feature of interest.

ACUTE LICHEN PLANUS. Presented by Dr. Ormsby.

The patient was presented because of the similarity of the eruption to some of the papular syphilodermata. The patient, a man of 27 years, had a generalized flat papular eruption. Most of the lesions, particularly the small ones, were typical of lichen planus. There was, however, no itching. The patient had also a general adenopathy. Of three Wassermann tests made at different places, one was reported as positive, one as negative and one as indecisive.

MANHATTAN DERMATOLOGICAL SOCIETY.

Regular Meeting, May 12, 1916.

George M. MacKee, M.D., *Chairman.*

EPITHELIOMA(?) OF THE LIP. Presented by Dr. Howard Fox.

The patient, C. T., was a man, thirty-three years of age, born in the United States, a chaffeur by occupation. Nine weeks ago a lesion, which he thought was a cold sore, appeared upon the lower lip. It failed to disappear, however, and at the end of three weeks he consulted a physician, who prescribed burned alum and lycopodium for a local application. He used this for three weeks, the lesion increasing slowly in size. One week ago, *e.g.*, after the lesion had existed nine weeks, a Wassermann test was made and proved to be negative. On examination, the patient presented a round, crusted, elevated, firm, moderately hard enlargement of the lower lip. It was situated upon the centre part of the right side of the vermilion border and was about three-eighths of an inch in diameter. It was slightly tender upon palpation. It was impossible to palpate any enlargement of the submaxillary glands. The patient gave no history and presented no signs or symptoms of syphilis. (Ten days after his presentation, a second Wassermann test was made after two provocative injections of salicylate of mercury had been given. The reaction was again absolutely negative. The patient was then given massive filtered X-ray treatment.)

Discussion.

Dr. Wise agreed with the diagnosis and said the case could be cured with the X-ray treatment, but that it should be watched for adenitis of the neck. If adenitis supervened, the glands should be operated on by a radical operation on the neck. The speaker said the lesion of the lip could be eliminated by the X-ray alone.

Dr. Satenstein said it was a well-known fact that spirochætæ from lesions of the lip were very difficult to find unless one went very deeply into the tissue. He agreed with Dr. Oulmann that further microscopical examination should be made, even to the extent of making a culture, but would not favor a biopsy. Superficial scraping from lesions of the lip very often did not reveal the spirochætæ.

Dr. Mount said he understood the duration of this lesion had been nine weeks and there would most certainly be a positive Wassermann reaction in nine weeks. Personally he was not in favor of biopsies, especially on malignant growths, because they all knew that the lymph channels were opened up and there was no use in subjecting the patient to the possible danger of dissemination. The speaker would treat the patient for epithelioma with the Roentgen ray.

Dr. Foerster (by invitation) said that before using the Roentgen ray, it should be determined with certainty that the lesion is not a chancre. The man had very reddened fauces and some grayish patches in the left tonsillar region, as seen in an imperfect light, where he understood the tonsil had been removed. It did not appear to be an initial lesion, clinically.

Dr. Rosen said he agreed with Dr. Foerster in his opinion of the case. At the Vanderbilt Clinic he had recently seen a man, thirty-eight years of age, with a superficial, circumscribed ulcer on the upper lip, very similar in character to Dr. Fox's case, where the dark field examination and the Wassermann tests were negative. Notwithstanding the negative reports of the laboratory, they considered the lesion syphilitic (primary lesion). After two injections of arsenobenzol, and three mercury salicylate injections, the ulcer had entirely healed. In this case he would recommend antisyphilitic treatment, before more radical measures were resorted to.

Dr. McEwen (by invitation) said he hardly believed that the condition was an initial lesion. There was absolutely no gland to be felt on that side, and surely at this time, if it were a primary lesion, the usual syphilitic adenitis would be present. It also lacked the characteristic induration of an initial lesion. While he would not pronounce absolutely that this was an epithelioma, he was inclined to believe that that was what it would prove to be. In handling this case, he would advise some further search for spirochætæ, and if nothing was found, they would be justified in carrying out a therapeutic test with salvarsan. If further observation seemed to indicate that it was an epithelioma and they were going to do a biopsy, he would strongly advise that the lesion be excised completely. As far as the lip was concerned, the tissues were elastic and a radical, surgical removal would not produce great deformity.

Dr. Geyser said in a case of that kind, where there was a chance of doubt between an initial lesion and epithelioma and with possibilities of being more likely to prove an epithelioma, he would use a therapeutic test, not salvarsan, but the X-ray, the Cornell tube with a direct contact for fifteen minutes, by two treatments. If it were a specific lesion, had an inflammatory reaction and was made worse, he would then give mercurial treatment, which would clear up the matter. If, on the other hand, it were epithelioma, the lesion would get better. The difference between the two was this, that one lesion was destructive and the other a building-up process. A building-up process could be torn down by the X-ray, but a destructive process made worse, because both things made matters worse in the same direction.

Dr. Satenstein said that an epithelioma, growing to that size in ten weeks, would have broken down. Epitheliomatous tissue grew very rapidly and broke down very readily. As to the Wassermann reaction, there was a case at the City Hospital, three or four years previously, with a rupial eruption, in which Dr. Noguchi had had twenty-one negative reactions to the Wassermann test.

There were some cases of syphilis, the speaker said, in which one did not get a positive Wassermann reaction.

Dr. MacKee said he thought that this case was one of epithelioma, but would want to confirm that diagnosis by excluding a chancre. In the first place, an initial lesion usually occurred on the upper lip and was usually very mild. An initial lesion of the mouth was almost always accompanied by adenitis. Furthermore, in this case there was a tendency to hyperkeratosis of the lip—the whole lip was somewhat hyperkeratotic. The duration was a matter of history. The man might have had keratosis there for months or a year and never paid any attention to it until he felt a little infiltration. The negative Wassermann test also spoke against a chancre. A primary lesion of ten weeks with a negative Wassermann reaction would be unusual. He agreed with Dr. Satenstein that a further search should be made for the spirochætæ. He would not make a biopsy and agreed with Dr. McEwen that if they were going to make a biopsy, a radical excision should be done. If this was an epithelioma, the speaker thought that the X-ray or radium, properly used, should be given a trial. These agents had cured many such cases. Where there was a hyperkeratosis of the entire lip, as in this case, assuming that this hyperkeratosis represented a pre-epitheliomatous condition, the X-ray would probably prove more efficacious than the knife.

Dr. Satenstein asked how long the case had been under observation.

Dr. Gottheil said he would like to ask Dr. Fox if it was not unusual for epithelioma to obtain that size in ten weeks. This was so unusual as to cause doubt on that diagnosis.

Dr. Howard Fox said that the patient had been under his observation for the past ten days. He was an intelligent man and able to give a trustworthy and accurate history. At his first visit, about ten days ago, the patient stated that the lesion had appeared nine weeks previously. The diagnosis of chancre seemed improbable on account of the small size of the lesion, slight amount of induration, entire absence of glandular enlargement and negative Wassermann reaction. All of the chancres of the lip that the speaker had seen had been of good size and invariably accompanied by marked enlargement of the submaxillary glands. The diagnosis of epithelioma seemed most probable, in spite of the short duration. The speaker said he was especially anxious to elicit discussion as to the advisability of X-ray treatment and of making a biopsy in this case, assuming that the lesion was probably an epithelioma.

BLASTOMYCOSIS. Presented by Dr. Oulmann.

This case, a male adult, had been presented before the Society previously, about November, 1914. He was then shown as a case of blastomycosis and sent to the hospital at that time. He had been treated before that as a case of blastomycosis and the organism had been found. The case had not been seen for over a year, and when the man came back he showed almost the same eruption on the arms and face as he had on his trunk and body. Some of the lesions discharged pus which had an odor. On the hands the lesions healed up without the formation of any scars. There was some slight atrophy and pigmentation of the lesions on the face and scrotum, and the patient had stated that eight years previously, he had received a cut on the scrotum. He was taken to the Vanderbilt Clinic, where the diagnosis was confirmed by Dr. Satenstein, who had been kind enough to make some specimens of the organism. These could be seen under the microscope very nicely, as well as in the smear.

Discussion.

Dr. McEwen (by invitation) said he thought this a case of blastomycosis, but that it showed a rather deeper type of lesions than most of the cases seen in Chicago. The man looked as though a general systemic infection was present and the case reminded him of the one reported by Dr. Ormsby, in which there was a general systemic infection, the skin lesions developing from beneath and ultimately discharging pus, as in this case. The scars on the arms were certainly not of the type of the cases seen in Chicago.

Dr. Satenstein said he might add to the history of the case that Professor Zinsser at the college, was unable to cultivate the organism, although he accepted the blastomyces as seen in the smears.

Dr. Foerster (by invitation) said he thought this a very interesting case, because of the subcutaneous lesions, with deep abscess formation and the development of atrophic and keloidal scars. The remarks of Dr. McEwen, in regard to possible later systemic and bone involvement, were pertinent to this more serious type of infection. In cases where potassium iodide was not well tolerated, the speaker said he believed that Dr. Zeisler had called attention to copper sulphate as a good alternative treatment.

Dr. Howard Fox recalled a case which he had seen in Berlin, in the clinic of Professor Max Joseph, which resembled somewhat the one presented. The patient presented quite a number of deep-seated, chronic, ulcerating lesions, scattered over the back, in which actinomyces had been found.

Dr. Oulmann said, regarding Dr. Fox's statement, that the pus in his case had been entirely different. The pus was granular and in actinomycosis they found the fungus pretty easily. The speaker was very glad that he could sustain his diagnosis, made two years previously. He knew that for over one and one half years this man had been free from the potassium iodide eruption. He considered the systemic condition and said the patient had nephritis. The patient had received arsenic and he hoped to keep him under observation to determine if the infection was systemic.

FURUNCULOSIS ORIENTALIS. Presented by Dr. Geyser.

The patient was a female adult and was shown for two reasons. The first was for the effect of the X-ray on hypertrichosis. The hairs had become a source of annoyance to the patient and were removed without a burn, attended by no bad results whatever. The second reason had been that the case presented an old lesion of furunculosis orientalis, which had also occurred in every member of this patient's family, who had one or more of these lesions. This case showed a lesion on the left chin. The family thought this condition due to the drinking water they used.

Discussion.

Dr. Wise said that not having seen the original growth of hair, it was very hard to give a definite opinion. He thought Dr. Geyser's results were excellent and there were no signs of damage of any kind from the X-ray, in this patient. As regarded the scar, in his experience every Armenian he had seen presented a scar of that kind on the face and scars of the Aleppo boil were very common. The speaker said that active Aleppo boils, however, were very rare in this country, in his experience.

Dr. Oulmann, in regard to X-ray treatment of hypertrichosis, said that the usual reports they received were not as satisfactory as in this case of Dr. Geyser's. The speaker did not particularly advise it himself, because, judging by some of the results, he could not approve of this method.

Dr. Mount said he had seen one case of the so-called Aleppo boil, but it was not a boil in any sense of the word. The patient was an Italian who had never been outside of Italy, except on journeying to this country. He had fallen and injured his forehead and had come to the Cornell Clinic with a verrucous, slightly raised, oblong area in the centre of the forehead, with absolutely no ulceration of any kind. A diagnosis was made by almost everyone there of verrucous tuberculosis, and the speaker took out a piece and sent it up to Dr. Ewing, who reported that the Leishman-Donovan bodies were present, and it was a case of so-called Aleppo boil.

Dr. Gottheil said he wanted to congratulate Dr. Geyser on his small consideration for consistency. He had heard Dr. Geyser say before this Society that he considered the X-ray treatment for hypertrichosis unreliable.

Dr. MacKee said, relative to X-ray treatment, that he did not think any technique had been so far established that could produce uniformly good results in hypertrichosis, although it was possible to obtain good results in some cases of hypertrichosis with the X-ray, without damage to the skin. It was a risky thing to attempt. The slightest erythema might be followed a year later or even longer, by teleangiectasia or even atrophy. The speaker did not think it was safe and was opposed to the X-ray treatment of hypertrichosis.

Dr. Ochs said, regarding radium treatment of hypertrichosis, that one of his patients had lately had some radium treatment on some parts where there was a hair growth. The hair had been destroyed—there was no trace of it at all and it had not returned. He spoke to another doctor about this, who had treated cases with radium, and who said it was successful in taking off small hairs which appeared in patches.

Dr. MacKee said that Dr. Ochs' statement about radium was true. But radium, in this condition, was no more efficacious and just as dangerous as the X-ray.

EPITHELIOMA SERPIGINOSUM. Presented by Dr. Oulmann.

The patient was a male adult, who had been under treatment for two weeks. He had been treated at different places for the past five or six years and showed a large ulceration at the back part of the left ear. There were a number of superficial ulcerations on the scalp and a number of scars on the neck and further down the back. The doctor who had referred him stated that a number of Wassermann reactions had been negative and the lesions had been thought to be of a tuberculous nature, but in the speaker's opinion it was a case of epithelioma serpiginosum.

Discussion.

Dr. Wise said that in his opinion this case would require microscopical corroboration.

Dr. Oulmann said he hoped to obtain a biopsy, but did not know anything else which formed that kind of a scar and such superficial ulceration as this patient showed.

ACRODERMATITIS CHRONICA ATROPHICANS. Presented by Drs. MacKee and Rosen.

The patient was a female adult, and the speaker had had no opportunity to see the case before. She had come to Dr. Fordyce's' service that day, for the first time. She was forty-nine years of age, born in Sweden, and the disease had begun fifteen years previously. The woman stated she had been under

Dr. Fordyce's care fifteen years ago. She presented the characteristic anetodermia of the knee and scleroderma of the lower portion of the legs. There was also a lesion on the left elbow and arm, consisting of a band of scleroderma tous and atrophic skin. The patient was the subject of a report published by Dr. Fordyce, seven or eight years ago, at which time she was under treatment for syphilis and cutaneous atrophy.

Discussion.

Dr. Howard Fox asked Dr. Wise if the disease seemed to favor any particular race. He recalled having seen three other cases in Scandinavians.

Dr. Gottheil said he had seen several cases of this kind in Jews.

Dr. MacKee said that one very interesting feature was the absolute freedom from lesions at the elbow flexures and in the popliteal spaces, in this patient.

Dr. Wise said that Finger and Oppenheim had collected and analyzed about two hundred cases from the literature, without being able to find any ætiological factor. There was no racial predilection.

EPITHELIOMA(?) OF THE NOSE. Presented by Drs. Howard Fox and Ochs.

The patient, M. W., was a colored woman, thirty-four years of age, born in the United States. The lesion upon the ala of the nose had existed for eighteen months, those upon the bridge and side of the nose had appeared during the past year. They had never ulcerated or caused any subjective symptoms. Examination showed a semi-solid elliptical mass on the edge of the right ala nasi, near the septum. Upon the bridge and sides of the nose were about ten pinhead sized, flattened, slightly elevated, non-itchy, dry papules with depressions in the centre, similar to those seen in lichen planus papules. The patient was poorly nourished and in poor health.

Discussion.

Dr. Rosen said the case was one of juvenile warts. The lesion on the nose was probably a wart that had been scratched and ulceration had followed.

Dr. Ochs said that when he had first seen the case, juvenile warts had been his diagnosis. He had seen many cases with these small warts, and in his experience among the colored, this would be the second case of epithelioma he had seen. The only other case he saw was in a colored woman who showed epitheliomatous degeneration of a large gumma of the thigh. They did not make a biopsy in this case because the lesion was so small, and if it were done, they would excise the whole thing. His diagnosis was epithelioma.

Dr. Satenstein said there were two other conditions to be considered. Instead of ordinary epithelioma, it could be benign cystic epithelioma, considering the small lesions; the other consideration was the possibility of lymphangioma. The lesion on the nose was very soft and the lesions on the face were very soft, and these two conditions should be considered as well as epithelioma.

Dr. MacKee said he agreed with Dr. Satenstein and would seriously consider a diagnosis of benign cystic epithelioma. The speaker had a case with lesions like this, over the chest and back, in a negress. Histologically, the case was one of benign cystic epithelioma. It was impossible, in spite of prolonged and careful study, to determine the derivation of the cells. In all probability it was a nævus.

SYPHILITIC PERIOSTITIS. Presented by Drs. Howard Fox and Ochs.

The patient, E. C., was a colored woman, twenty-eight years of age, born in the United States. She had had two miscarriages. About two and a half years ago, the middle finger of the left hand became enlarged and painful, and about a month ago, an ulceration had appeared upon the side of the finger. A radiogram showed syphilitic periostitis of the first phalanx of the middle finger, having the shape of a truncated cone, with its base at the metacarpo-phalangeal joint. The Wassermann reaction was strongly positive.

Discussion.

Dr. Gottheil said that this did not look like a case of syphilitic disease of the periosteum of the bone, while the ulceration which was present looked suspicious. He was inclined to consider a diagnosis of tuberculosis.

SYPHILITIC PERIOSTITIS. Presented by Drs. Howard Fox and Ochs.

The patient, A. N., was a woman, twenty-nine years of age, born in the United States. She had been infected with syphilis four years ago, for which she had received irregular and insufficient treatment. She presented a diffuse, painful, hard swelling along the right ulnar bone, just above the wrist. This had first appeared two years ago, but improved greatly of late, under mercurial injections. A radiogram showed a typical syphilitic periostitis. The patient also presented a small group of nodules upon the side of the nose. The Wassermann reaction was strongly positive.

STRIÆ LINEARIS. Presented by Drs. Gottheil and Ochs.

The patient was a female, twenty-eight years of age. The lesions began with itching and then, from twenty-four hours to a week later, a depressed, scar-like lesion formed, which, after that, became striate. The skin itself was not red, œdematous or infiltrated, and the linear, atrophic condition seemed to arise from an unknown cause. The lesions were particularly well marked on the cheeks, left side of the nose and chin. No acne could be elicited to cause the condition.

LICHEN HYPERTROPHICUS. Presented by Dr. Gilmour.

The patient was a male adult. Eighteen months previously, there appeared a small, red, itchy patch at the inner side of the left thigh, over and above the internal malleolus. After six months it became raised and reached the size presented. Formerly it had been more raised and rough. The patient did not give a history of having had typical lichen planus papules. There was a moderately raised, smooth patch, over and above the internal malleolus, six inches long and two inches wide. It had a reddish color with a bluish tinge. A few small papules were seen around the edge of the patch.

BOOK REVIEWS.

DISEASES OF THE SKIN. By Richard L. Sutton, M.D., Professor of Diseases of the Skin, University of Kansas School of Medicine; Former Chairman of the Dermatological Section of the American Medical Association; Member American Dermatological Association; Assistant Surgeon, United States Navy, Retired; Dermatologist to the Christian Church Hospital. With six hundred and ninety-three illustrations and eight colored plates (916 pages). St. Louis: *C. V. Mosby Company.* 1916.

Considering the rapid multiplication, in recent years, of text books, theses, monographs, etc., dealing with the science of Dermatology, the advent of a new text book calls to mind the hackneyed and oft-repeated introductory periods of the preface of many a book,—remarks which, after being "boiled down," amount to this: That no book should be written unless the author has something new to say, or unless he can present something already known, in a new and original light.

That Sutton has succeeded in complying with both—instead of only one—of these requirements, is a gratifying fact. The writing of a complete and good text book on dermatology and syphilology must at all times be a Herculean task; more so in this, perhaps, than in any of the other—more stable—branches of medical science. The author's intimate knowledge of the subject in its many-sided practical and scientific aspects, coupled with an unusually large personal experience gained in the practice of the specialty, presaged the writing of a book which not only is complete in every detail as a student's text book, but which, with its many references to recent literature, constitutes a valuable source of information to the advanced dermatologist. These references are, in the opinion of the reviewer, a most valuable part of the work, compiled as they are, with great care and accuracy, and being brought up to date in connection with all the important dermatoses. An interesting and unusual feature lies in the fact that the majority of these references direct the reader's attention to the scientific work and literary efforts of *American* dermatologists, in striking contrast to the text books of yesterday, most of whose bibliographies fairly teem with references to foreign names, foreign journals, foreign ideas, foreign interpretations, to say nothing of foreign dogmatisms. What a relief it is to most of us, to get hold of a reference in good old English, instead of having to wade through a maze of words, phrases and chapters in another tongue! To paraphrase the slogan of a popular newspaper, Sutton's treatise may be justly designated as "*an American book for the American student.*"

The latest facts and discoveries of modern dermatology and syphilology are presented in the text, which includes in its scope all the diseases and anomalies of the skin and adjacent mucosæ. The construction of the sentences, while forcible and concise, is at the same time not so much so as to make the reading tiresome or disagreeable.

In recognition of the ever increasing importance of the microscopic findings in skin disorders, Sutton devotes more space to histopathology than has yet been attempted in modern American text books. In some of the more interesting dermatoses, as in syringocystadenoma, for example, the histopathological changes not only are described fully, but a brief résumé of the findings of other authorities is included, enabling the student who seeks something more than the bare facts, to obtain much information from the text alone, without having recourse to other works.

Full consideration is given the large subject of treatment, most of which is based upon the author's personal experience. Radiotherapy, vaccines, carbon dioxide, etc., etc., are dealt with in comprehensive fashion under separate headings.

The classification of skin diseases is based upon Hebra's plan, modified slightly by Crocker.

One of the striking features of the treatise lies in its generous supply of half-tone illustrations and colored plates; the most carping critic will concede that these are admirable photographic reproductions, and that their presence in a book of this kind is of considerable value to the student and practitioner.

Several diseases are for the first time pictured in a text book, among them being uta or espundia, cutaneous thrush, foot-and-mouth disease and trichinosis.

The many half-tone photographic cuts depicting the histopathological changes of numerous dermatoses, constitute an item of great importance and much value, accompanying, as they do, the adjoining text. Nearly all these cuts are reproductions of the author's own microphotographs and testify to many laborious hours spent in the dark-room.

The book contains 916 pages, is printed on heavy glazed paper and is necessarily somewhat cumbersome. The type is large and well spaced. The index is well compiled and generous in its scope. F. W.

LINKS IN A CHAIN OF RESEARCH ON SYPHILIS (OXIDATION AND REDUCTION). Being the Hunterian Lectures Delivered Before the Royal College of Surgeons, March, 1916. By J. E. R. McDonagh, F.R.C.S. pp. 206. *Harrison and Sons*, London. 1916; *Lea and Febiger*, sole agents for United States and Canada: $7.00.

After a short résumé of the advances in our knowledge of syphilis since the eighteenth century, the author proceeds to review his contentions that the Spirocheta pallida is only a phase in the life history of a protozoön which he calls Leucocytozoön syphilides.

His investigations are of a physico-chemical nature and prove to him and his co-workers that the same principles which play an important rôle in dyeing and staining, underlie the immunity reactions and chemotherapy, *i.e.*, adsorption, oxidation and reduction.

The emulsoid-suspensoid test for syphilis is based on the exact colloidal state of the antibody, and it is claimed by the author to be more reliable than the Wassermann reaction or any of its modifications. By the addition of glacial acetic acid to the luetic serum, part of the emulsoids present become converted into suspensoids through the loss of some of their water contents; the further addition of ammonium sulphate precipitates the suspensoids. As syphilitic serum is richer in lipoid globulin (emulsoids), it will give a more marked precipitation than other sera, which can be detected by the naked eye. He has had one hundred cases tested and controlled by the Wassermann reaction. One case gave a three plus Wassermann, although the patient had never had syphilis; by the emulsoid-suspensoid test, the serum was normal. Seventeen of the one hundred cases gave a negative Wassermann reaction when the test should have been positive.

The chemotherapy of syphilis is, according to the author's theory, based on the amount of active oxygen which, if increased, increases the host's resistance and thus destroys the parasites indirectly. Salvarsan acts this way by catalysis. In fact he endeavors to explain many conditions as due to want of active oxygen, even piles.

Of all the arsenic preparations, as atoxyl, arsacetin, arseno-phenyl-glycine, galyl and ludyl, salvarsan is conceded to be the best; but far from perfect. In order to get a more effective remedy against syphilis, he was led to look for elements which are trivalent but of smaller atomic weight and less metallic than arsenic. Such he finally elaborated in di-ortho-amino-thio-benzene, commercially called "intramine"; also an aluminum compound called "aluvine," and an iron compound called "ferrivine." He uses these three drugs as adjuvants to each other and sometimes with salvarsan, depending on the stage of the disease. Mercury and iodides are also called on for assistance.

Intramine is recommended not only for lues but also for lupus vulgaris, chronic gonorrhœa, chronic ulcers, malignant disease, leprosy, tuberculosis, and as a dressing for wounds.

An interesting explanation of the therapeutic action of the breast milk from a woman receiving salvarsan, and that of salvarsanized serum, is that catalysts in the minutest traces can have phenomenal activity: for instance, the merest trace of platinum black, if added to a tank full of hydrogen peroxide, is sufficient to decompose the whole amount.

The reader must be referred to the book in order to get a proper conception of what the author is trying to prove, as the lectures are a series of *post hoc ergo propter hoc* dissertations, in which colloids, electrolytes, oxidations and reductions figure prominently. It is by no means an easy matter to follow him, putting together the links of the chain of research on syphilis.

The work needs confirmation, and the author is right in asking it from those who refute his statements. Although his conclusions are a little heretical, nevertheless there is a good deal of sense in his reasoning, and one is led to admire the accomplishments of Dr. McDonagh, for he is a veritable medical Thesaurus.

Throughout the book there is a tendency to belittle the epoch-making discoveries of Schaudinn, Wassermann and Ehrlich: even going so far as saying that the last mentioned was entirely ignorant of the principles which govern chemotherapy and of the action of the compounds prepared. One can't help but lamenting the "Hass" that the European holocaust is beginning to sow among some of our continental colleagues. E. W. A.

THE HEALTH OF THE SKIN. By George Pernet, M.D. Methuen's Health Series. Edited by N. Bishop Harman, M.B., F.R.C.S. *Methuen and Co.*, Ltd., London.

This is one of a popular series on "Health," quaintly written, and containing many valuable pointers and interesting statements in reference to the subject at hand.

The use of deep red goggles to prevent freckling, by excluding the action on the retina of the chemical or actinic rays of the sun, is a novel suggestion.

The ladies will be delighted to hear an authority like Dr. Pernet, not objecting to the application of rouge; and no doubt, a few will forget his caution to use good quality only, carefully, and in moderation.

He advocates the running of the hair-dressing parlors on "aseptic lines," something much to be desired by everybody, except the tonsorial despots.

Exception may be taken to the remark on page 97, that an ingrown toenail is usually due only to inattention to the periodical cutting and trimming. Isn't it more usually due to tight boots or stockings, or in the case of the finger, to a tight-fitting glove?

For a little book of 105 pages it covers the subject remarkably well, and should make a valuable addition to the lay library. Even the practitioner could garner some useful points by its perusal. E. W. A.

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